GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:23:58 ; Search time 46 Seconds
(without alignments)
560.757 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters: 572060

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1605	100.0	312	2	US-09-254-465A-9	Sequence 9, Appli
2	1605	100.0	312	2	US-09-907-794A-64	Sequence 64, Appl
3	1605	100.0	312	2	US-09-905-125A-64	Sequence 64, Appl
4	1605	100.0	312	2	US-09-902-775A-64	Sequence 64, Appl
5	1605	100.0	312	2	US-09-906-700-64	Sequence 64, Appl
6	1605	100.0	312	2	US-09-903-603A-64	Sequence 64, Appl
7	1605	100.0	312	2	US-09-904-920A-64	Sequence 64, Appl
8	1605	100.0	312	2	US-09-909-064-64	Sequence 64, Appl
9	1605	100.0	312	2	US-09-905-381A-64	Sequence 64, Appl
10	1605	100.0	312	2	US-09-906-618-64	Sequence 64, Appl
11	1605	100.0	312	2	US-09-953-499-9	Sequence 9, Appli
12	1605	100.0	312	2	US-09-906-646-64	Sequence 64, Appl
13	1605	100.0	312	2	US-09-904-462-64	Sequence 64, Appl
14	1605	100.0	312	2	US-09-902-736A-64	Sequence 64, Appl
15	1605	100.0	312	2	US-09-906-722A-64	Sequence 64, Appl
16	1465	91.3	298	2	US-09-152-060-76	Sequence 76, Appl
17	1465	91.3	298	2	US-09-852-797-76	Sequence 76, Appl
18	1465	91.3	298	2	US-09-853-161-76	Sequence 76, Appl
19	1465	91.3	298	2	US-10-058-993-76	Sequence 76, Appl
20	461.5	28.8	310	2	US-09-907-794A-423	Sequence 423, App
21	461.5	28.8	310	2	US-09-905-125A-423	Sequence 423, App
22	461.5	28.8	310	2	US-09-902-775A-423	Sequence 423, App
23	461.5	28.8	310	2	US-09-906-700-423	Sequence 423, App
24	461.5	28.8	310	2	US-09-903-603A-423	Sequence 423, App
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27	461.5	28.8	310	2	US-09-905-381A-423	Sequence 423, App
28	461.5	28.8	310	2	US-09-906-618-423	Sequence 423, App
29	461.5	28.8	310	2	US-09-906-646-423	Sequence 423, App
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33	461.5	28.8	310	2	US-09-906-722A-423	Sequence 423, App
34	405	25.2	299	2	US-09-188-930-189	Sequence 189, App
35	404	25.2	299	2	US-09-188-930-331	Sequence 331, App
36	404	25.2	299	2	US-09-462-270-2	Sequence 2, Appli
37	404	25.2	299	2	US-09-254-465A-1	Sequence 1, Appli
38	404	25.2	299	2	US-09-312-283C-189	Sequence 189, App
39	404	25.2	299	2	US-09-312-283C-331	Sequence 331, App
40	404	25.2	299	2	US-09-907-794A-119	Sequence 119, App
41	404	25.2	299	2	US-09-905-125A-119	Sequence 119, App
42	404	25.2	299	2	US-09-902-775A-119	Sequence 119, App
43	404	25.2	299	2	US-09-397-243D-3	Sequence 3, Appli
44	404	25.2	299	2	US-09-906-700-119	Sequence 119, App
45	404	25.2	299	2	US-09-903-603A-119	Sequence 119, App

ALIGNMENTS

RESULT 1
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 9.1e-149;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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RESULT 2
US-09-907-794A-64
; Sequence 64, Application US/09907794A
; Patent No. 6635468
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/907,794A
;  CURRENT FILING DATE:  2001-07-17
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-907-794A-64

  Query Match           100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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RESULT 3
US-09-905-125A-64
; Sequence 64, Application US/09905125A
; Patent No. 6664376
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
```

```
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/905,125A
;  CURRENT FILING DATE:  2001-07-12
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-905-125A-64

  Query Match           100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 4
US-09-902-775A-64
; Sequence 64, Application US/09902775A
; Patent No. 6686451
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/902,775A
;  CURRENT FILING DATE:  2001-07-10
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
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;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
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;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
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;  PRIOR APPLICATION NUMBER: PCT/US99/30911
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;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
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; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-902-775A-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 5
US-09-906-700-64
; Sequence 64, Application US/09906700
; Patent No. 6723535
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/906,700
;  CURRENT FILING DATE:  2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-906-700-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 6
US-09-903-603A-64
; Sequence 64, Application US/09903603A
; Patent No. 6767995
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
```

; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: GNE.1618P2C12
; CURRENT APPLICATION NUMBER: US/09/903,603A
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-903-603A-64

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 9.1e-149;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 7
US-09-904-920A-64
; Sequence 64, Application US/09904920A
; Patent No. 6806352
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,920A
; CURRENT FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13

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;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-904-920A-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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RESULT 8
US-09-909-064-64
; Sequence 64, Application US/09909064
; Patent No. 6818449
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/909,064
;  CURRENT FILING DATE:  2001-07-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
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;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-909-064-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 9
US-09-905-381A-64
; Sequence 64, Application US/09905381A
; Patent No. 6818746
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/905,381A
;  CURRENT FILING DATE:  2001-07-13
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-905-381A-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 10
US-09-906-618-64
; Sequence 64, Application US/09906618
; Patent No. 6828146
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
```

; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/906,618
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-906-618-64

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 9.1e-149;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Patent No. 6838554
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 9.1e-149;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 12

US-09-906-646-64
; Sequence 64, Application US/09906646
; Patent No. 6852848
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/906,646
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens

US-09-906-646-64

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 9.1e-149;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

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Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 13
US-09-904-462-64
; Sequence 64, Application US/09904462
; Patent No. 6878807
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,462
; CURRENT FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698

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;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-904-462-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 14
US-09-902-736A-64
; Sequence 64, Application US/09902736A
; Patent No. 6894148
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/902,736A
;  CURRENT FILING DATE:  2001-07-10
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-902-736A-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
```

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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
                  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 15
US-09-906-722A-64
; Sequence 64, Application US/09906722A
; Patent No. 6946262
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: GNE.1618P2C61
;  CURRENT APPLICATION NUMBER: US/09/906,722A
;  CURRENT FILING DATE:  2001-07-16
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-906-722A-64

  Query Match             100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 9.1e-149;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
                ||||||||||||
Db        301 KAAAGGSRGQEF 312


Search completed: December  6, 2005, 13:32:56
Job time : 48 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:11:03 ; Search time 189 Seconds
(without alignments)
725.324 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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1: geneseqp1980s:*
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5: geneseqp2002s:*
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7: geneseqp2003bs:*
8: geneseqp2004s:*
9: geneseqp2005s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1605	100.0	312	2	AAY23324	Aay23324 A33 relat
2	1605	100.0	312	2	AAY08060	Aay08060 Human PRO
3	1605	100.0	312	2	AAY13354	Aay13354 Amino aci
4	1605	100.0	312	3	AAB33421	Aab33421 Human PRO
5	1605	100.0	312	3	AAY70668	Aay70668 Human PRO
6	1605	100.0	312	3	AAB24401	Aab24401 Human PRO
7	1605	100.0	312	3	ADC78384	Adc78384 Human PRO
8	1605	100.0	312	4	AAB80222	Aab80222 Human PRO
9	1605	100.0	312	4	AAU00821	Aau00821 Human imm
10	1605	100.0	312	4	AAU12339	Aau12339 Human PRO
11	1605	100.0	312	4	AAB53081	Aab53081 Human ang
12	1605	100.0	312	6	ABU71600	Abu71600 Human PRO
13	1605	100.0	312	6	ABO17783	Abo17783 Novel hum
14	1605	100.0	312	6	ABU71455	Abu71455 Human PRO
15	1605	100.0	312	6	ABU81037	Abu81037 Human PRO
16	1605	100.0	312	6	ABU71901	Abu71901 Human sec
17	1605	100.0	312	6	ABO01784	Abo01784 Novel hum
18	1605	100.0	312	6	ABU66737	Abu66737 Human PRO
19	1605	100.0	312	6	ABU54357	Abu54357 Human sec
20	1605	100.0	312	6	ABO47372	Abo47372 Human sec
21	1605	100.0	312	6	ABU59818	Abu59818 Novel sec
22	1605	100.0	312	6	ABO25008	Abo25008 Human sec
23	1605	100.0	312	6	ABU64509	Abu64509 Human sec
24	1605	100.0	312	6	ABU67355	Abu67355 Human sec
25	1605	100.0	312	6	ABO14875	Abo14875 Human sec
26	1605	100.0	312	6	ABU07738	Abu07738 Human A-3
27	1605	100.0	312	6	ABU67013	Abu67013 Human sec
28	1605	100.0	312	6	ABU69632	Abu69632 Novel hum
29	1605	100.0	312	6	ABO14814	Abo14814 Human sec
30	1605	100.0	312	6	ADA45855	Ada45855 Novel hum
31	1605	100.0	312	6	ADA76286	Ada76286 Human PRO
32	1605	100.0	312	6	ADB29269	Adb29269 Human sec
33	1605	100.0	312	6	ADA18936	Ada18936 Human PRO
34	1605	100.0	312	6	ADA61559	Ada61559 Homo sapi
35	1605	100.0	312	6	ADB19344	Adb19344 Novel hum
36	1605	100.0	312	6	ADB27885	Adb27885 Human PRO
37	1605	100.0	312	6	ADA86364	Ada86364 Novel hum
38	1605	100.0	312	6	ADB15928	Adb15928 Human PRO
39	1605	100.0	312	6	ADA47714	Ada47714 Human PRO
40	1605	100.0	312	6	ADA18125	Ada18125 Human sec
41	1605	100.0	312	6	ABO32766	Abo32766 Human sec
42	1605	100.0	312	6	ADA67509	Ada67509 Human PRO
43	1605	100.0	312	6	ADB30516	Adb30516 Human PRO
44	1605	100.0	312	6	ADA85812	Ada85812 Novel hum
45	1605	100.0	312	6	ADA97024	Ada97024 Human PRO

ALIGNMENTS

RESULT 1
AAY23324
ID AAY23324 standard; protein; 312 AA.
XX
AC AAY23324;
XX
DT 02-SEP-1999 (first entry)
XX
DE A33 related antigen PRO245.
XX
KW A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
KW tumour.
XX
OS Homo sapiens.
XX
PN WO9927098-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-US024855.
XX
PR 21-NOV-1997; 97US-0066364P.
PR 20-MAR-1998; 98US-0078936P.
PR 17-SEP-1998; 98WO-US019437.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA, Tumas D;
PI Wood WI;
XX
DR WPI; 1999-404743/34.
DR N-PSDB; AAX81770.
XX
PT Antigens PRO301, PRO362 and PRO245 related to A33.
XX
PS Example 3; Fig 11; 122pp; English.
XX
CC The specification describes A33 related antigens PRO301, PRO362 and
CC PRO245. The methods and compositions of the invention are useful for the
CC treatment and diagnosis of inflammatory disease and tumours in mammals.
CC Such inflammatory diseases include of inflammatory bowel disease,
CC systemic lupus erythematosis, rheumatoid arthritis, juvenile chronic
CC arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
CC idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
CC Sjogren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic
CC anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
CC autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura, immune-

CC mediated thrombocytopenia, thyroiditis, Grave's disease, Hashimoto's
CC thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis,
CC diabetes mellitus, immune-mediated renal disease, glomerulonephritis,
CC tubulointerstitial nephritis, demyelinating diseases of the central and
CC peripheral nervous systems such as multiple sclerosis, idiopathic
CC polyneuropathy, hepatobiliary diseases, infectious hepatitis A, B, C, D,
CC E, nonhepatotropic viruses, autoimmune chronic active hepatitis, primary
CC biliary cirrhosis, granulomatous hepatitis, sclerosing cholangitis,
CC inflammatory and fibrotic lung diseases, gluten-sensitive enteropathy,
CC Whipple's disease, autoimmune or immune-mediated skin diseases allergic
CC diseases of the lung such as eosinophilic pneumonias, idiopathic
CC pulmonary fibrosis and hypersensitivity pneumonitis transplantation
CC associated diseases disease. The present sequence represents PRO245
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 2
AAY08060
ID AAY08060 standard; protein; 312 AA.
XX
AC AAY08060;
XX
DT 11-SEP-2000 (first entry)
XX
DE Human PRO245 protein.
XX
KW Inflammatory cell infiltration; immune response; T cell proliferation;
KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy;
KW T cell-mediated disease; spondyloarthropathy; sclerosis; renal disease;
KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.
XX
OS Homo sapiens.
XX
PN WO9914241-A2.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019437.
XX
PR 17-SEP-1997; 97US-0059119P.
PR 18-SEP-1997; 97US-0059263P.
PR 28-OCT-1997; 97US-0063550P.
PR 12-NOV-1997; 97US-0065186P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066770P.
PR 04-JUN-1998; 98US-0088026P.
XX
PA (GETH) GENENTECH INC.
XX
PI Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
XX
DR WPI; 1999-229499/19.
DR N-PSDB; AAX37664.
XX
PT Composition containing novel polypeptide PRO245, its agonist or
PT antagonist.
XX
PS Example 1; Fig 2; 177pp; English.
XX
CC This invention describes a novel composition containing (apart from a
CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
CC antagonist, or their fragments, for modulating: (i) infiltration of
CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
CC proliferation. The composition increases or decreases any of the effects
CC (i)-(iii). The products of the invention have anti-inflammatory, anti-
CC autoimmune and anti-diabetic activity. (I), and its (ant)agonists and
CC their fragments, are used to treat immune-related diseases, particularly
CC T cell-mediated diseases. The diseases treated include systemic lupus
CC erythematosus, rheumatoid arthritis, juvenile chronic arthritis,
CC spondyloarthropathies, systemic sclerosis (scleroderma), idiopathic
CC inflammatory myopathies (dermatomyositis, polymyositis), Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic anemia
CC (immune pancytopenia, paroxysmal nocturnal hemoglobinuria), autoimmune
CC thrombocytopenia (idiopathic thrombocytopenic purpura immune-mediated
CC thrombocytopenia), thyroiditis (Grave's disease, Hashimoto's thyroiditis,
CC juvenile lymphocytic thyroiditis, atrophic thyroiditis), diabetes
CC mellitus, immune-mediated renal disease (glomerulonephritis,
CC tubulointerstitial nephritis), multiple sclerosis, idiopathic
CC demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
CC inflammatory demyelinating polyneuropathy, infectious hepatitis
CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
CC (ulcerative colitis: Crohn's disease), gluten-sensitive enteropathy, and
CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
CC bullous skin diseases, erythema multiforme,contact dermatitis, psoriasis,
CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
CC hypersensitivity pneumonitis, and transplantation associated diseases
CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
CC or fragment can also be used as an adjuvant in treatment of tumors.
CC Antibodies against (I) can also be used for diagnosing such diseases.
CC This sequence represents the human PRO245 protein described in the
CC invention
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 2; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 3
AAY13354
ID   AAY13354 standard; protein; 312 AA.
XX
AC   AAY13354;
XX
DT   25-JUN-1999  (first entry)
XX
DE   Amino acid sequence of protein PRO245.
XX
KW   Secreted protein; transmembrane protein; human; enterocolitis;
KW   Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW   congenital microvillus atrophy; skin disease; cell growth;
KW   abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW   Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin;
KW   dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic;
KW   wound healing; tissue repair.
XX
OS   Homo sapiens.
XX
PN   WO9914328-A2.
XX
PD   25-MAR-1999.
XX
PF   16-SEP-1998;   98WO-US019330.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063732P.
PR   29-OCT-1997;   97US-0063734P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   29-OCT-1997;   97US-0064215P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   18-NOV-1997;   97US-0065693P.
PR   21-NOV-1997;   97US-0066120P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   24-NOV-1997;   97US-0066772P.
PR   25-NOV-1997;   97US-0066840P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Wood WI,  Gurney AL,  Goddard A,  Pennica D,  Chen J,  Yuan J;
XX
DR   WPI; 1999-229533/19.
DR   N-PSDB; AAX52225.
XX
PT   New isolated human genes and polypeptides used in, e.g. treatment of
PT   gastrointestinal ulceration.
XX
PS   Claim 12; Fig 24; 320pp; English.
XX
CC   AAY13344-403 represent secreted and transmembrane human proteins. The
CC   cDNA sequences are obtained from cDNA libraries, prepared from fetal
CC   lung, fetal kidney, fetal brain, fetal liver and fetal retina. The
CC   encoded polypeptides have specific uses based on their homology to known
CC   polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated
CC   with the preservation and maintenance of gastrointestinal mucosa and the
CC   repair of acute and chronic mucosal lesions (e.g. enterocolitis,
CC   Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital
CC   microvillus atrophy), skin diseases associated with abnormal keratinocyte
CC   differentiation (e.g. psoriasis, epithelial cancers such as lung squamous
CC   cell carcinoma of the vulva and gliomas), potent effects on cell growth
CC   and development, diseases related to growth or survival of nerve cells
CC   including Parkinson's disease, Alzheimer's disease, ALS, neuropathies or
CC   cancer. PRO265 can be used as for fibromodulin, e.g. for reducing dermal
CC   scarring. PRO264 can be used as a target for anti-tumor drugs. PRO533 may
CC   be used in the treatment of Usher Syndrome or Atrophia areata; PRO269 can
CC   be used as an anti-thrombotic agent; PRO287 polypeptides and portions may
CC   have therapeutic applications in wound healing and tissue repair; PRO317
CC   can be used for treating problems of the kidney, uterus, endometrium,
CC   blood vessels, or related tissue, e.g. in the heart of genital tract
XX
SQ   Sequence 312 AA;

  Query Match            100.0%;  Score 1605;  DB 2;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
```

```
Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 4
AAB33421
ID AAB33421 standard; protein; 312 AA.
XX
AC AAB33421;
XX
DT 29-JAN-2001 (first entry)
XX
DE Human PRO245 protein UNQ219 SEQ ID NO:36.
XX
KW Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;
KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW autoimmune thrombocytopaenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantation associated disease;
KW graft rejection; graft-versus-host-disease.
XX
OS Homo sapiens.
XX
PN WO200053758-A2.
XX
PD 14-SEP-2000.
XX
PF 02-MAR-2000; 2000WO-US005841.
XX
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99US-0123618P.
PR 12-MAR-1999; 99US-0123957P.
PR 23-MAR-1999; 99US-0125775P.
PR 12-APR-1999; 99US-0128849P.
PR 20-APR-1999; 99WO-US008615.
PR 28-APR-1999; 99US-0131445P.
PR 04-MAY-1999; 99US-0132371P.
PR 14-MAY-1999; 99US-0134287P.
PR 02-JUN-1999; 99WO-US012252.
PR 23-JUN-1999; 99US-0141037P.
PR 20-JUL-1999; 99US-0144758P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-OCT-1999; 99US-0162506P.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
XX
DR WPI; 2000-572271/53.
DR N-PSDB; AAC58586.
XX
PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosis, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus.
XX
PS Claim 33; Fig 16; 309pp; English.
XX
CC The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central and
CC peripheral nervous systems, hepatobiliary diseases, inflammatory bowel
CC disease, gluten-sensitive enteropathy and Whipple's disease, autoimmune
CC or immune-mediated skin diseases, allergic diseases, immunological
CC diseases of the lung, and transplantation associated diseases including
CC graft rejection and graft-versus-host-disease. AAC58397 to AAC58578
CC represent PCR primers and hybridisation probes used in the isolation of
CC human PRO sequences. AAC58579 to AAC58642 and AAB33414 to AAB33477
CC represent human PRO polynucleotide and protein sequences given in the
CC exemplification of the present invention
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 3; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
```

```
Db        301 KAAAGGSRGQEF 312


RESULT 5
AAY70668
ID   AAY70668 standard; protein; 312 AA.
XX
AC   AAY70668;
XX
DT   18-JUL-2000  (first entry)
XX
DE   Human PRO245 protein.
XX
KW   PRO245; UNQ219; dermatological; immunosuppressive; antiinflammatory;
KW   immunostimulant; antiasthmatic; antirheumatic; antiarthritic; virucide;
KW   antiallergic; haemostatic; hepatotropic; antidiabetic; antianaemic;
KW   nephrotropic; neuroprotective; anticoagulant; immunological disorder;
KW   lung; pneumonia; skin; psoriasis; kidney; glomerulonephritis; arthritis;
KW   spondyloarthropathy; SLE; systemic lupus erythematosis; scleroderma;
KW   idiopathic inflammatory myopathy; anaemia; thrombocytopenia; diabetes;
KW   thyroiditis; Grave's disease; demyelinating disease; multiple sclerosis;
KW   Crohn's disease; hepatobiliary disease; hepatitis; asthma; human;
KW   graft-versus-host-disease.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   39. .43
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   59. .63
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   98. .102
FT                   /note= "N-glycosylation site"
FT   Modified-site   100. .104
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   149. .153
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   182. .188
FT                   /note= "N-myristoylation site"
FT   Modified-site   187. .191
FT                   /note= "N-glycosylation site"
FT   Modified-site   205. .209
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   226. .230
FT                   /note= "Amidation site"
FT   Modified-site   236. .240
FT                   /note= "N-glycosylation site"
FT   Modified-site   239. .245
FT                   /note= "N-myristoylation site"
FT   Modified-site   255. .261
FT                   /note= "N-myristoylation site"
FT   Modified-site   257. .263
FT                   /note= "N-myristoylation site"
FT   Modified-site   277. .281
FT                   /note= "N-glycosylation site"
FT   Modified-site   284. .288
FT                   /note= "Casein Kinase II phosphorylation site"
FT   Modified-site   305. .311
FT                   /note= "N-myristoylation site"
XX
PN   WO200015797-A2.
XX
PD   23-MAR-2000.
XX
PF   15-SEP-1999;   99WO-US021547.
XX
PR   17-SEP-1998;   98US-0100858P.
PR   17-SEP-1998;   98WO-US019437.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Fong S,  Goddard A,  Gurney AL,  Tumas D,  Wood WI;
XX
DR   WPI; 2000-271435/23.
DR   N-PSDB; AAZ52202.
XX
PT   Composition for treatment and diagnosis of immune related diseases e.g.
PT   Grave's disease comprises a PRO245, PRO217, PRO301, PRO266, PRO335,
PT   PRO331 or PRO326 polypeptide or its agonists or antagonists (preferably
PT   antibodies).
XX
PS   Example 1; Fig 4; 201pp; English.
XX
CC   The present sequence is the human protein PRO245, encoded by UNQ219 cDNA,
CC   designated as clone DNA35638. It is isolated from human foetal liver
CC   tissue. It has structural homology to transmembrane protein receptor
CC   tyrosine kinase family and has 60% amino acid identity with human c-myb
CC   protein. It enhances or suppresses the infiltration of inflammatory cells
CC   into tissues, proliferation of T-lymphocytes and modulates the immune
CC   response. This sequence is useful for treatment of immune related
CC   disorders, like SLE, rheumatoid/juvenile arthritis, spondyloarthropathy,
CC   systemic sclerosis (scleroderma), idiopathic inflammatory myopathies such
CC   as dermatomyositis, Sjogren's syndrome, systemic vasculitis, sarcoidosis,
CC   autoimmune haemolytic anaemia, thrombocytopenia, thyroiditis e.g. Grave's
CC   disease, diabetes mellitus, immune-mediated renal disease e.g.
CC   glomerulonephritis, demyelinating diseases such as multiple sclerosis and
CC   Guillain-Barre syndrome, hepatobiliary diseases like hepatitis and
CC   primary biliary cirrhosis, inflammatory and fibrotic lung diseases such
CC   as inflammatory bowel disease (e.g. Crohn's disease), autoimmune or
CC   immune-mediated skin diseases such as psoriasis, allergies like asthma,
CC   immunological diseases of the lungs such as eosinophilic pneumonia and
CC   transplantation associated diseases such as graft-versus-host-disease
XX
SQ   Sequence 312 AA;

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 6
AAB24401
ID   AAB24401 standard; protein; 312 AA.
XX
AC   AAB24401;
XX
DT   07-NOV-2000  (first entry)
XX
DE   Human PRO245 protein sequence SEQ ID NO:67.
XX
KW   Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW   diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
```

KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW cytostatic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX
PN WO200032221-A2.
XX
PD 08-JUN-2000.
XX
PF 30-NOV-1999; 99WO-US028313.
XX
PR 01-DEC-1998; 98WO-US025108.
PR 16-DEC-1998; 98US-0112850P.
PR 12-JAN-1999; 99US-0115554P.
PR 08-MAR-1999; 99WO-US005028.
PR 12-MAR-1999; 99US-0123957P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 02-JUN-1999; 99WO-US012252.
PR 23-JUN-1999; 99US-0141037P.
PR 20-JUL-1999; 99US-0144758P.
PR 26-JUL-1999; 99US-0145698P.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-OCT-1999; 99US-0162506P.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ;
PI Goddard A, Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF;
PI Smith V, Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX
PT Nucleic acids encoding PRO polypeptides useful for preventing, diagnosing
PT and treating diagnosing a cardiovascular, endothelial or angiogenic
PT disorders in mammals.
XX
PS Claim 72; Fig 28; 315pp; English.
XX
CC The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the prevention,
CC treatment and diagnosis of diseases associated with inappropriate PRO
CC expression such as cardiovascular, endothelial or angiogenic disorders in
CC mammals (e.g. atherosclerosis, cancers and cardiac hypertrophy). For
CC example, the nucleic acids (NCs) and vectors containing them and the PRO
CC polypeptide may be used to treat disorders associated with decreased PRO
CC expression. AAA77510 to AAA77721 and AAB24388 to AAB24435 represent
CC nucleotide and protein sequences used in the exemplification of the
CC present invention
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 3; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 7
ADC78384
ID ADC78384 standard; protein; 312 AA.
XX
AC ADC78384;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human PRO245 protein.
XX
KW antiinflamatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian;
KW nootropic; neuroprotective; vasotropic; chemotaxic; angiogenic;
KW neurotrophic; osteopathic; antiasthmatic; antiarthritic; antirheumatic;
KW antiarteriosclerotic; cardiant; antidiabetic; cerebroprotective;
KW thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome;
KW gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease;
KW Alzheimer's; ALS; neuropathy; dermal scarring; wound healing;
KW nerve repair; thrombosis; bone; cartilage formation; angiogenesis;
KW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disorder;
KW atherosclerosis; cardiac injury; infertility; premature aging; AIDS;
KW diabetes; stroke; gene therapy; transgenic; PRO; human.
XX
OS Homo sapiens.
XX
PN WO200015796-A2.
XX
PD 23-MAR-2000.
XX
PF 15-SEP-1999; 99WO-US021090.
XX
PR 16-SEP-1998; 98WO-US019330.
XX
PA (GETH) GENENTECH INC.
XX
PI Chen J, Goddard A, Gurney AL, Hillan K, Pennica D, Wood WI;
PI Yuan J;
XX
DR WPI; 2000-271434/23.
DR N-PSDB; ADC78383.
XX
PT Novel nucleic acids encoding secreted and transmembrane polypeptides with
PT homology, e.g. to growth and cancer-associated antigens.
XX
PS Claim 12; SEQ ID NO 64; 355pp; English.
XX
CC The invention relates to a novel nucleic acid encoding a PRO polypeptide.
CC The polypeptides and polynucleotides of the invention may be useful as
CC research tools and as therapeutics for treating enterocolitis, Zollinger-
CC Ellison syndrome, gastrointestinal ulceration, psoriasis, cancer,
CC Parkinson's disease, Alzheimer's disease, ALS, neuropathies, dermal
CC scarring and wound healing, nerve repair, thrombosis, bone and/or
CC cartilage formation, angiogenesis, asthma, rheumatoid arthritis, multiple
CC sclerosis, inflammatory disorders, atherosclerosis, cardiac injury,
CC infertility, premature aging, AIDS, diabetes complications and stroke.
CC The molecules may also be utilised during gene therapy procedures and

```
CC   transgenic animal production. The current sequence is that of the human
CC   PRO protein of the invention.
XX
SQ   Sequence 312 AA;

  Query Match           100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 8
AAB80222
ID   AAB80222 standard; protein; 312 AA.
XX
AC   AAB80222;
XX
DT   24-APR-2001  (first entry)
XX
DE   Human PRO245 protein.
XX
KW   Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
KW   antiparkinsonian nootropic; neuroprotective; vulnerary; cardiant;
KW   antiangiogenic; vasotropic; antiasthmatic; antirheumatic; cancer;
KW   antiarthritic; antiinfertility; antidiabetic; antiviral; diabetes;
KW   ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
KW   ischaemia; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200104311-A1.
XX
PD   18-JAN-2001.
XX
PF   22-FEB-2000; 2000WO-US004414.
XX
PR   07-JUL-1999;   99US-0143048P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   20-DEC-1999;   99WO-US030999.
PR   05-JAN-2000; 2000WO-US000219.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Botstein D,  Desnoyers L,  Eaton DL,  Ferrara N;
PI   Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME,  Goddard A;
PI   Godowski PJ,  Grimaldi CJ,  Gurney AL,  Hillan KJ,  Kljavin IJ;
PI   Mather JP,  Pan J,  Paoni NF,  Roy MA,  Stewart TA,  Tumas D;
PI   Williams PM,  Wood WI;
XX
DR   WPI; 2001-081051/09.
DR   N-PSDB; AAF72383.
XX
PT   Sixty one nucleic acids encoding PRO polypeptides which are useful in the
PT   treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous
PT   cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's
PT   disease).
XX
PS   Claim 1; Fig 24; 393pp; English.
XX
CC   The present sequence is one of sixty one novel secreted and transmembrane
CC   PRO polypeptides. The PRO polypeptides are useful for treating skin
CC   diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma),
CC   gastrointestinal disorders (e.g. enterocolitis), neurodegenerative
CC   diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair,
CC   cardiovascular disorders (e.g. endometrial bleeding angiogenesis,
CC   ischaemias such as coronary ischaemia, atherosclerosis), inflammatory
CC   disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis),
CC   infertility, AIDS and diabetes and retinal disorders such as retinitis
CC   pigmentosum. The PRO nucleic acids have applications in molecular
CC   biology, including use as hybridization probes, and in chromosome and
CC   gene mapping
XX
SQ   Sequence 312 AA;

  Query Match           100.0%;  Score 1605;  DB 4;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 9
AAU00821
ID   AAU00821 standard; protein; 312 AA.
XX
AC   AAU00821;
XX
DT   04-JUL-2001  (first entry)
XX
```

```
DE   Human immune response protein PRO245 (UNQ219).
XX
KW   Human; PRO245; UNQ219; immune response; osteoarthritis;
KW   systemic lupus erythematosus; rheumatoid arthritis; systemic sclerosis;
KW   juvenile chronic arthritis; spondyloarthropathy; Sjogren's syndrome;
KW   idiopathic inflammatory; myopathy; polymyositis; systemic vasculitis;
KW   sarcoidosis; autoimmune haemolytic anaemia; immune pancytopaenia;
KW   autoimmune thrombocytopaenia; idiopathic thrombocytopaenic purpura;
KW   thyroiditis; Grave's disease; Hashimoto's thyroiditis; diabetes mellitus;
KW   glomerulonephritis; demyelinating disease; multiple sclerosis;
KW   Guillain-Barre syndrome; hepatobiliary disease;
KW   chronic inflammatory demyelinating polyneuropathy; infectious hepatitis;
KW   auto immune chronic active hepatitis; primary biliary cirrhosis;
KW   granulomatous hepatitis; sclerosing cholangitis; ulcerative colitis;
KW   inflammatory bowel disease; Crohn's disease; Whipple's disease;
KW   erythaemia multiforme; psoriasis; asthma; allergic rhinitis; urticaria;
KW   food hypersensitivity; eosinophilic pneumonia; graft rejection;
KW   idiopathic pulmonary fibrosis; graft-versus-host-disease; immunogen;
KW   antibody.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .20
FT                   /label= Signal_peptide
FT   Protein         21. .312
FT                   /label= Mature_PRO245
FT   Modified-site   98. .102
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   182. .188
FT                   /note= "Glycine is N-myristoylated"
FT   Modified-site   187. .191
FT                   /note= "Asn is N-glycosylated"
FT   Region          226. .230
FT                   /label= Amidation_site
FT   Modified-site   236. .240
FT                   /note= "Asn is N-glycosylated"
FT   Domain          237. .258
FT                   /label= Transmembrane_domain
FT   Modified-site   239. .245
FT                   /note= "Glycine is N-myristoylated"
FT   Modified-site   255. .261
FT                   /note= "Glycine at 255 is N-myristoylated"
FT   Modified-site   257. .263
FT                   /note= "Glycine at 257 is N-myristoylated"
FT   Modified-site   277. .281
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   305. .311
FT                   /note= "Glycine is N-myristoylated"
XX
PN   WO200119991-A1.
XX
PD   22-MAR-2001.
XX
PF   20-MAR-2000; 2000WO-US007377.
XX
PR   15-SEP-1999;   99WO-US021547.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Fong S,  Goddard A,  Gurney AL,  Hillan KJ,  Tumas D,  Wood WI;
XX
DR   WPI; 2001-226823/23.
DR   N-PSDB; AAS00157.
XX
PT   Composition for diagnosing and treating immune related diseases, e.g.
PT   rheumatoid arthritis and diabetes mellitus, comprises a PRO polypeptide,
PT   agonist, antagonist or fragment.
XX
PS   Claim 31; Fig 2; 138pp; English.
XX
CC   The sequence represents Human PRO245 (UNQ219), a protein involved in the
CC   immune response. PRO polypeptides, and (ant)agonists to them, are used in
CC   compositions for modulating infiltration of inflammatory cells into a
CC   tissue, modulating an immune response and modulating proliferation of T-
CC   lymphocytes in response to an antigen. Immune related diseases can be
CC   treated with the compositions, such as, systemic lupus erythematosus,
CC   rheumatoid arthritis, osteoarthritis, juvenile chronic arthritis,
CC   spondyloarthopathies, systemic sclerosis, idiopathic inflammatory
CC   myopathies (e.g. polymyositis), Sjogren's syndrome, systemic vasculitis,
CC   sarcoidosis, autoimmune haemolytic anaemia (e.g. immune pancytopaenia),
CC   autoimmune thrombocytopaenia (e.g. idiopathic thrombocytopaenic purpura),
CC   thyroiditis (e.g. Grave's disease, Hashimoto's thyroiditis), diabetes
CC   mellitus, immune-mediated renal disease (e.g. glomerulonephritis),
CC   demyelinating diseases of the central and peripheral nervous systems e.g.
CC   multiple sclerosis or Guillain-Barre syndrome, and chronic inflammatory
CC   demyelinating polyneuropathy, hepatobiliary diseases such as infectious
CC   hepatitis (hepatitis A, B, C, D, E and other non-hepatotropic viruses),
CC   auto immune chronic active hepatitis, primary biliary cirrhosis,
CC   granulomatous hepatitis, and sclerosing cholangitis, inflammatory bowel
CC   disease (ulcerative colitis, Crohn's disease and Whipple's disease),
CC   autoimmune or immune-mediated skin diseases (e.g. erythaemia multiforme
CC   and psoriasis), asthma, allergic rhinitis, urticaria, food
CC   hypersensitivity, immunologic diseases of the lung such as eosinophilic
CC   pneumonias, idiopathic pulmonary fibrosis, transplantation associated
CC   diseases including graft-versus-host-disease and graft rejection. PRO
CC   polypeptides can be used to diagnose immune related diseases, to identify
CC   inhibitors, and to stimulate the proliferation of T lymphocytes. Anti-PRO
CC   antibodies can be used to detect PRO and in diagnosis. PRO polypeptides,
CC   antibodies and (ant)agonists can be used in rational drug design
XX
SQ   Sequence 312 AA;

  Query Match             100.0%;  Score 1605;  DB 4;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 10
AAU12339
ID   AAU12339 standard; protein; 312 AA.
XX
AC   AAU12339;
XX
DT   24-OCT-2001  (first entry)
XX
DE   Human PRO245 polypeptide sequence.
XX
KW   Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
KW   prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;
KW   ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
KW   A-peptide; factor VIIA; gene therapy.
```

XX
OS Homo sapiens.
XX
PN WO200140466-A2.
XX
PD 07-JUN-2001.
XX
PF 01-DEC-2000; 2000WO-US032678.
XX
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 09-DEC-1999; 99US-0170262P.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
PR 03-MAR-2000; 2000US-0187202P.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 05-JUN-2000; 2000US-0209832P.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2001-408281/43.
DR N-PSDB; AAS21411.
XX
PT Isolated , secretory and transmembrane PRO polypeptide used to detect
PT other PRO polypeptides, link bioactive molecules to cells expressing PRO
PT polypeptides, and detect the presence of mammalian tumors e.g. lung,
PT breast, prostate, cervical.
XX
PS Claim 12; Fig 336; 813pp; English.
XX
CC AAU12172-AAU12446 represent novel human secretory and transmembrane PRO
CC polypeptides. The PRO polypeptides are useful to detect other PRO
CC polypeptides, to link bioactive molecules to cells expressing PRO
CC polypeptides, to modulate biological activities of cells expressing PRO
CC polypeptides, and to detect the presence of mammalian lung, colon,
CC breast, prostate, rectal, cervical or liver tumours by comparing PRO
CC polypeptide expression in a cell sample to that in a control sample. Some
CC of the 275 sequences are also useful to stimulate the release of tumour
CC necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
CC differentiation of chondrocytes, the proliferation or gene expression in
CC pericyte cells, the release of proteoglycans from cartilage, the
CC proliferation of inner ear utricular supporting cells or of T-
CC lymphocytes, the release of a cytokine from peripheral blood monocytes
CC (PBMCs), or the proliferation of endothelial cells. Some of the PRO
CC polypeptides may modulate glucose or free fatty acid uptake by skeletal
CC muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
CC VIIA. The PRO polypeptides can be used in assays to identify molecules
CC involved in binding interactions. The polynucleotides encoding PRO
CC polypeptides can be used to generate probes, antisense RNA/DNA,
CC transgenic or knock out animals and can be used in gene therapy
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 11
AAB53081
ID AAB53081 standard; protein; 312 AA.
XX
AC AAB53081;
XX
DT 28-FEB-2001 (first entry)
XX
DE Human angiogenesis-associated protein PRO245, SEQ ID NO:91.
XX
KW Human; angiogenesis-associated protein; PRO; endothelial cell growth;
KW cardiac hypertrophy; cardiovascular disorder; endothelial disorder;
KW angiogenic disorder; atherosclerosis; osteoporosis; hypertension;
KW myocardial infarction; diabetic retinopathy; rheumatoid arthritis;
KW Crohn's disease; psoriasis; endometriosis; ulcer; wound healing; cancer;
KW Alzheimer's disease; Huntington's disease; stroke; drug screening;
KW gene therapy; transgenic animal.
XX
OS Homo sapiens.
XX
PN WO200053753-A2.
XX
PD 14-SEP-2000.
XX
PF 05-JAN-2000; 2000WO-US000219.
XX
PR 08-MAR-1999; 99WO-US005028.
PR 12-MAR-1999; 99US-0123957P.
PR 14-MAY-1999; 99US-0134287P.

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PR   02-JUN-1999;   99WO-US012252.
PR   23-JUN-1999;   99US-0141037P.
PR   20-JUL-1999;   99US-0144758P.
PR   26-JUL-1999;   99US-0145698P.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   02-DEC-1999;   99WO-US028564.
PR   02-DEC-1999;   99WO-US028565.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Ferrara N,  Gerber H,  Goddard A;
PI   Godowski PJ,  Gurney AL,  Hillan KJ,  Kuo SS,  Mark MR,  Marsters SA;
PI   Paoni NF,  Pitti RM,  Watanabe CK,  Williams PM,  Wood WI;
XX
DR   WPI; 2001-090793/10.
DR   N-PSDB; AAC97437.
XX
PT   New isolated nucleic acid for producing a PRO polypeptide, analyzing
PT   genetic disorders and treating cardiovascular, endothelial or angiogenic
PT   disorders, such as atherosclerosis, wounds or cancer.
XX
PS   Claim 69; Fig 36; 293pp; English.
XX
CC   The invention relates to novel human angiogenesis-associated proteins
CC   designated PRO proteins (AAB53064-B53097), and to nucleic acids encoding
CC   PRO proteins. The invention also relates to vectors and host cells
CC   comprising a PRO nucleic acid, the recombinant production of a PRO
CC   protein, PRO antibodies specific for a PRO protein, fusion proteins
CC   comprising a PRO protein, agonists or antagonists of a PRO protein, and
CC   compounds which inhibit the expression of a PRO gene. The invention
CC   additionally encompasses methods of identifying modulators of PRO
CC   expression or activity; diagnosing a cardiovascular, endothelial or
CC   angiogenic disorder, or a susceptibility to such a disorder by detecting
CC   mutations in a PRO gene, or the expression level of a PRO gene within a
CC   particular tissue; treating a cardiovascular, endothelial or angiogenic
CC   disorder via the administration of a PRO protein, PRO nucleic acid, or
CC   PRO agonist or antagonist; a retroviral gene therapy vector comprising a
CC   PRO nucleic acid; and methods of inhibiting or stimulating endothelial
CC   cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the
CC   administration of a PRO protein, or an agonist or antagonist thereof. PRO
CC   nucleic acids, PRO proteins, antibodies against PRO proteins, PRO
CC   agonists and PRO antagonists may be used as therapeutic agents to treat
CC   cardiovascular, endothelial or angiogenic disorders, such as
CC   atherosclerosis, osteoporosis, myocardial infarction, hypertension,
CC   diabetic retinopathy, rheumatoid arthritis, Crohn's disease, psoriasis,
CC   endometriosis, ulcers, wounds, cancer, Alzheimer's disease, Huntington's
CC   disease, or stroke. PRO nucleic acids are additionally useful in the
CC   recombinant production of PRO proteins, as hybridisation probes to screen
CC   libraries to isolate cDNAs with sequence identity to PRO proteins, to map
CC   genes encoding PRO proteins, to analyse genetic disorders, and in gene
CC   therapy. PRO nucleic acids can also be used to produce transgenic animals
CC   useful for the development and screening of potential therapeutic agents.
CC   The present sequence represents a PRO protein of the invention
XX
SQ   Sequence 312 AA;

  Query Match             100.0%;  Score 1605;  DB 4;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 12
ABU71600
ID   ABU71600 standard; protein; 312 AA.
XX
AC   ABU71600;
XX
DT   16-JUN-2003  (first entry)
XX
DE   Human PRO polypeptide #11.
XX
KW   Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW   pathological disorder; cardiac insufficiency disorder; protein secretion;
KW   pancreas; diabetes; gastrointestinal mucosa; mucosal lesion; psoriasis;
KW   skin disease; keratinocyte differentiation; epithelial cancer; tumour;
KW   lung squamous cell carcinoma; epidermoid carcinoma; vulva; glioma;
KW   cytostatic; cardiant; endocrine; antidiabetic; gastrointestinal;
KW   antiulcer; dermatological; vulnerary.
XX
OS   Homo sapiens.
XX
PN   US2002146709-A1.
XX
PD   10-OCT-2002.
XX
PF   18-JUL-2001; 2001US-00909088.
XX
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059119P.
PR   17-SEP-1997;   97US-0059121P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   15-OCT-1997;   97US-0062125P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   24-OCT-1997;   97US-0063127P.
PR   24-OCT-1997;   97US-0063128P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063542P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063549P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063435P.
```

PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-328338/31.
DR N-PSDB; ACA58948.
XX
PT Isolated nucleic acid useful for e.g., treating pathological disorders
PT encodes a secreted or transmembrane protein.
XX
PS Claim 12; Fig 24; 473pp; English.
XX
CC The invention relates to human PRO polypeptides (secreted or
CC transmembrane polypeptides) and the polynucleotides encoding them. The
CC PRO polypeptides and polynucleotides can be used in treating pathological
CC disorders and tumours, in therapeutic treatment of cardiac insufficiency
CC disorders and in therapeutic treatment of disorders involving protein
CC secretion by the pancreas, including diabetes. They can also be used in
CC treating disorders associated with the preservation and maintenance of
CC gastrointestinal mucosa and the repair of acute and chronic mucosal
CC lesions, and skin diseases associated with abnormal keratinocyte
CC differentiation (e.g., psoriases, epithelial cancers such as lung
CC squamous cell carcinoma, epidermoid carcinoma of the vulva and gliomas).
CC The sequences can be used as molecular markers for protein
CC electrophoresis purposes and can be utilised in protein-protein binding
CC assays, biochemical screening assays, immunoassays and cell-based assays.
CC This sequence represents a human PRO polypeptide of the invention
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 6; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 13
ABO17783
ID ABO17783 standard; protein; 312 AA.
XX
AC ABO17783;
XX
DT 26-AUG-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO245.
XX
KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
KW TNF-alpha release; cell proliferation; cell differentiation;
KW gene expression modulator; proteoglycan release; cytokine release;
KW tumour; inflammatory disease; organ failure; atherosclerosis;
KW cardiac injury; infertility; birth defect; premature aging; AIDS;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
KW bioreactor; tissue typing.
XX
OS Homo sapiens.
XX
PN US2003032156-A1.
XX
PD 13-FEB-2003.
XX
PF 06-MAY-2002; 2002US-00140474.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.

PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 20-NOV-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00828366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-341980/32.
DR N-PSDB; ACD24020.
XX
PT New secreted and transmembrane PRO nucleic acids, for treating
PT inflammation, organ failure, atherosclerosis, cardiac injury,
PT infertility, birth defects, premature aging, axquired immunodeficiency
PT syndrome (AIDS), or cancer.
XX
PS Claim 12; Fig 336; 660pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC has 80 % sequence identity to, or the full-length coding sequence of, one
CC of 275 nucleotide sequences, and which encodes a corresponding
CC polypeptide selected from 275 amino acid sequences, where all sequences
CC are given in the specification. The polypeptide encoded by (I) is used to
CC detect PRO polypeptides, link a bioactive molecule to a cell expressing a
CC PRO polypeptide, modulate a biological activity of a cell, stimulate the
CC release of tumour necrosis factor (TNF)-alpha from human blood, modulate
CC the uptake of glucose or free fatty acid by cells, stimulate or inhibit
CC the proliferation or differentiation of cells or gene expression,
CC stimulate the release of proteoglycans, stimulate the release of cytokine
CC from peripheral blood mononuclear cells, inhibit the binding of A-peptide
CC to factor VIIA, or detect the presence of tumour in a mammal. The nucleic
CC acid and polypeptide encoded by it, are useful for treating inflammatory
CC diseases, organ failure, atherosclerosis, cardiac injury, infertility,
CC birth defects, premature aging, acquired immunodeficiency syndrome
CC (AIDS), cancer, or diabetic complications. The nucleic acid is useful as
CC hybridisation probes, in chromosome and gene mapping, and in generating
CC antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. Both are useful in tissue typing.
CC This is the amino acid sequence of a novel human secreted and
CC transmembrane PRO polypeptide
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 6; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

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Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
```

RESULT 14
ABU71455
ID ABU71455 standard; protein; 312 AA.
XX
AC ABU71455;
XX
DT 10-JUN-2003 (first entry)
XX
DE Human PRO polypeptide #11.
XX
KW Human; secreted and transmembrane protein; PRO polypeptide; cancer;
KW Alzheimer's disease; ischaemia; cytostatic; nootropic; vasotropic;
KW neuroprotective.
XX
OS Homo sapiens.
XX
PN US2002192659-A1.
XX
PD 19-DEC-2002.
XX
PF 10-JUL-2001; 2001US-00902853.
XX
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0062814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 24-OCT-1997; 97US-0063127P.
PR 24-OCT-1997; 97US-0063128P.
PR 27-OCT-1997; 97US-0063327P.
PR 27-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063542P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063549P.
PR 28-OCT-1997; 97US-0063550P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0063704P.
PR 29-OCT-1997; 97US-0063732P.
PR 29-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063735P.
PR 29-OCT-1997; 97US-0063738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.
PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065846P.
PR 18-NOV-1997; 97US-0065693P.
PR 21-NOV-1997; 97US-0066120P.
PR 21-NOV-1997; 97US-0066364P.
PR 24-NOV-1997; 97US-0066453P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 05-JAN-2000; 2000WO-US000219.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;
PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
PI Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ, Kljavin IJ;
PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
PI Williams PM, Wood WI;
XX
DR WPI; 2003-361832/34.
DR N-PSDB; ACA58345.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO245 or
PT PRO1868, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Claim 12; Fig 24; 474pp; English.
XX
CC The present invention relates to the isolation of novel human secreted
CC and transmembrane proteins (PRO polypeptides), and the polynucleotide
CC sequences encoding them. The polynucleotide sequences are useful in
CC molecular biology, as hybridisation probes, in chromosome and gene
CC mapping, in generating antisense RNA and DNA, and in gene therapy. The
CC polynucleotide sequences may also be used in preparing PRO polypeptides

```
CC   by recombinant techniques, and in generating either transgenic animals or
CC   knock-out animals which, in turn, are useful in the development and
CC   screening of therapeutically useful reagents. The PRO polypeptides or
CC   their antibodies are useful in preparing a medicament for treating a
CC   condition responsive to the polypeptide or antibody, such as cancer,
CC   Alzheimer's disease or ischaemia, and in various diagnostic assays.
CC   ABU71445-ABU71505 represent human PRO polypeptides of the invention
XX
SQ   Sequence 312 AA;

  Query Match            100.0%;  Score 1605;  DB 6;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 5.2e-123;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 15
ABU81037
ID   ABU81037 standard; protein; 312 AA.
XX
AC   ABU81037;
XX
DT   23-JUN-2003  (first entry)
XX
DE   Human PRO polypeptide #168.
XX
KW   Human; PRO polypeptide; secreted and transmembrane protein;
KW   anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW   bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW   sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW   hearing loss; coagulation disorder; stroke; heart attack; cardiant;
KW   antidiabetic; anorectic; vulnerary; antiarthritic; osteopathic;
KW   antirheumatic; auditory; cerebroprotective; angiogenic.
XX
OS   Homo sapiens.
XX
PN   US2003004311-A1.
XX
PD   02-JAN-2003.
XX
PF   19-DEC-2001; 2001US-00028072.
XX
PR   18-JUN-1997;   97US-0049911P.
PR   26-AUG-1997;   97US-0056974P.
PR   17-SEP-1997;   97US-0059113P.
PR   17-SEP-1997;   97US-0059115P.
PR   17-SEP-1997;   97US-0059117P.
PR   17-SEP-1997;   97US-0059122P.
PR   17-SEP-1997;   97US-0059184P.
PR   18-SEP-1997;   97US-0059263P.
PR   19-SEP-1997;   97US-0059352P.
PR   19-SEP-1997;   97US-0059588P.
PR   24-SEP-1997;   97US-0059836P.
PR   17-OCT-1997;   97US-0062250P.
PR   17-OCT-1997;   97US-0062285P.
PR   17-OCT-1997;   97US-0062287P.
PR   17-OCT-1997;   97US-0063755P.
PR   24-OCT-1997;   97US-0062814P.
PR   24-OCT-1997;   97US-0062816P.
PR   24-OCT-1997;   97US-0063045P.
PR   24-OCT-1997;   97US-0063082P.
PR   24-OCT-1997;   97US-0063127P.
PR   27-OCT-1997;   97US-0063327P.
PR   27-OCT-1997;   97US-0063329P.
PR   28-OCT-1997;   97US-0063550P.
PR   28-OCT-1997;   97US-0063561P.
PR   29-OCT-1997;   97US-0063704P.
PR   29-OCT-1997;   97US-0063733P.
PR   29-OCT-1997;   97US-0063735P.
PR   29-OCT-1997;   97US-0063738P.
PR   03-NOV-1997;   97US-0064248P.
PR   07-NOV-1997;   97US-0064809P.
PR   12-NOV-1997;   97US-0065186P.
PR   17-NOV-1997;   97US-0065846P.
PR   21-NOV-1997;   97US-0066364P.
PR   24-NOV-1997;   97US-0066453P.
PR   24-NOV-1997;   97US-0066511P.
PR   24-NOV-1997;   97US-0066770P.
PR   11-DEC-1997;   97US-0069212P.
PR   11-DEC-1997;   97US-0069278P.
PR   11-DEC-1997;   97US-0069334P.
PR   16-DEC-1997;   97US-0069694P.
PR   23-JAN-1998;   98US-0072320P.
PR   04-FEB-1998;   98US-0073612P.
PR   09-FEB-1998;   98US-0074086P.
PR   09-FEB-1998;   98US-0074092P.
PR   12-MAR-1998;   98US-0077791P.
PR   20-MAR-1998;   98US-0078910P.
PR   25-MAR-1998;   98US-0079294P.
PR   27-MAR-1998;   98US-0079663P.
PR   27-MAR-1998;   98US-0079728P.
PR   31-MAR-1998;   98US-0080165P.
PR   12-JUN-1998;   98WO-US012456.
PR   14-JUL-1998;   98WO-US014552.
PR   28-AUG-1998;   98WO-US017888.
PR   10-SEP-1998;   98WO-US018824.
PR   14-SEP-1998;   98WO-US019093.
PR   14-SEP-1998;   98WO-US019094.
PR   14-SEP-1998;   98WO-US019177.
PR   16-SEP-1998;   98WO-US019330.
PR   17-SEP-1998;   98WO-US019437.
PR   07-OCT-1998;   98WO-US021141.
PR   29-OCT-1998;   98WO-US022991.
PR   29-OCT-1998;   98WO-US022992.
PR   20-NOV-1998;   98WO-US024855.
PR   01-DEC-1998;   98WO-US025108.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   20-APR-1999;   99WO-US008615.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   01-SEP-1999;   99WO-US020111.
PR   08-SEP-1999;   99WO-US020594.
PR   13-SEP-1999;   99WO-US020944.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   05-OCT-1999;   99WO-US023089.
PR   29-NOV-1999;   99WO-US028214.
PR   30-NOV-1999;   99WO-US028313.
PR   30-NOV-1999;   99WO-US028409.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
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PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-352836/33.
DR N-PSDB; ACA67161.
XX
PT New isolated PRO polypeptide useful for treating diabetes, rheumatoid
PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
PT heart attack.
XX
PS Claim 12; Fig 336; 643pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides and polynucleotides are useful for preparing a medicament
CC useful in the treatment of diabetes, bone and/or cartilage disorders
CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
CC assays for PRO, by detecting its expression in specific cells, tissues or
CC serum, and for affinity purification of PRO from recombinant cell culture
CC or natural sources. ABU80870-ABU81144 represent the human PRO
CC polypeptides of the invention. Note: The sequence data for this patent
CC was obtained in electronic format directly from the USPTO web site at
CC seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 312 AA;

Query Match 100.0%; Score 1605; DB 6; Length 312;
Best Local Similarity 100.0%; Pred. No. 5.2e-123;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312
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Search completed: December 6, 2005, 13:27:24
Job time : 192 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:21:07 ; Search time 39 Seconds
(without alignments)
769.734 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_80:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	404	25.2	299	2	S56749	junctional adhesio
2	206.5	12.9	365	2	JC7780	coxsackie- and ade
3	184	11.5	811	2	A41054	fasciclin II, tran
4	184	11.5	873	2	B41054	fasciclin II PI-li
5	177	11.0	6642	2	T29757	protein UNC-89 - C
6	169.5	10.6	7962	2	I38346	elastic titin - hu
7	162	10.1	725	2	JE0100	neural cell adhesi
8	162	10.1	1367	2	A41228	protein-tyrosine k
9	161	10.0	344	2	A27681	nonspecific cross-
10	158	9.8	1092	1	JN0635	neural cell adhesi
11	157	9.8	860	2	JC5702	ErbB kinase activa
12	157	9.8	868	2	JC5701	ErbB kinase activa
13	156	9.7	1897	1	TDHULK	leukocyte antigen-
14	155.5	9.7	1328	2	T23007	hypothetical prote
15	155.5	9.7	2783	2	T34416	hypothetical prote
16	155	9.7	521	2	JC1508	biliary glycoprote
17	155	9.7	725	2	JE0099	neural cell adhesi
18	155	9.7	850	2	JC5700	ErbB kinase activa
19	155	9.7	1088	1	IJXLNL	neural cell adhesi
20	154.5	9.6	1323	2	PN0568	connectin 3B - chi
21	154.5	9.6	4391	2	A38096	perlecan precursor
22	153	9.5	4162	2	T42633	connectin/titin -
23	152.5	9.5	1091	1	IJCHNL	neural cell adhesi
24	152	9.5	1033	2	S19247	cell adhesion prot
25	152	9.5	1239	1	A32579	neuroglian - fruit
26	152	9.5	5175	2	T20992	hypothetical prote
27	152	9.5	5198	2	T43290	hemicentin precurs
28	151.5	9.4	352	2	T33433	hypothetical prote
29	151.5	9.4	521	2	S34338	biliary glycoprote
30	151.5	9.4	761	1	IJHUNG	neural cell adhesi
31	151.5	9.4	1240	2	T03097	CDO protein - huma
32	151	9.4	773	2	T46283	hypothetical prote
33	150.5	9.4	519	2	A44783	ecto-ATPase precur
34	150.5	9.4	1051	2	A39712	kinase-like protei
35	150.5	9.4	1199	2	T23005	hypothetical prote
36	150	9.3	1501	2	I58148	protein-tyrosine-p
37	150	9.3	1863	2	S46217	protein-tyrosine-p
38	150	9.3	1898	2	S46216	leukocyte antigen-
39	149.5	9.3	349	2	A34815	carcinoembryonic a
40	149	9.3	1277	2	T30532	neural cell adhesi
41	149	9.3	1499	2	I50212	protein-tyrosine-p
42	149	9.3	1907	2	S50893	protein-tyrosine-p
43	148	9.2	858	1	IJRTNC	neural cell adhesi
44	148	9.2	1379	2	JC4954	vascular endotheli
45	147.5	9.2	333	2	A31923	amalgam protein pr

ALIGNMENTS

RESULT 1
S56749
junctional adhesion molecule precursor - human
N;Alternate names: F11 platelet antigen; platelet adhesion molecule PAM-1; platelet F11
C;Species: Homo sapiens (man)
C;Date: 27-Oct-1995 #sequence_revision 01-Feb-2002 #text_change 09-Jul-2004
C;Accession: A59406; S56749
R;Ozaki, H.; Ishii, K.; Horiuchi, H.; Arai, H.; Kawamoto, T.; Okawa, K.; Iwamatsu, A.; K
J. Immunol. 163, 553-557, 1999
A;Title: Cutting edge: combined treatment of TNF-alpha and IFN-gamma causes redistributi
A;Reference number: A59406; MUID:99323940; PMID:10395639
A;Accession: A59406
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-299 <OZA>
A;Cross-references: UNIPROT:Q9Y624; UNIPARC:UPI0000000DC1; GB:AAD42050; NID:g5326797; PI
R;Naik, U.P.; Ehrlich, Y.H.; Kornecki, E.
Biochem. J. 310, 155-162, 1995
A;Title: Mechanisms of platelet activation by a stimulatory antibody: cross-linking of a
A;Reference number: S56749; MUID:95374438; PMID:7646439
A;Accession: S56749
A;Molecule type: protein
A;Residues: 28-49,'X',51-53;62-73,'E',75-103;123,'F',125-130;'FDKDXTIYLNXY';'LT',206,'X'
A;Cross-references: UNIPARC:UPI00001468C7; UNIPARC:UPI00001468CD; UNIPARC:UPI00001468D1;
A;Note: the order of the peptides other than the amino terminus was not determined
C;Genetics:
A;Gene: JAM
C;Keywords: glycoprotein; phosphoprotein; platelet aggregation; platelet membrane
F;1-25/Domain: signal sequence #status predicted <SIG>
F;26-299/Product: junctional adhesion molecule #status predicted <MAT>

Query Match 25.2%; Score 404; DB 2; Length 299;
Best Local Similarity 35.2%; Pred. No. 1.9e-24;
Matches 102; Conservative 46; Mismatches 126; Indels 16; Gaps 7;

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Qy          2 ARRSRHRLLLLLLRYLV--VALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSS 59
              |:  |  | | :|  |:  :|||       :    :  |    |      |:|     : |
Db          5 AQVERKLLCLFILAILLCSLALG-----SVTVHSSEPEVRIPENNPVKLSCAYSGFS-SP 58

Qy         60 RLEWK-KLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
              |:|||   | :   | |   :   :::|   :    |  |:||| | | | | ||   | |
Db         59 RVEWKFDQGDTTRLVCYNNKITASYEDRVTFLPTGITFKSVTREDTGTYTCMVS--EEGG 116

Qy        119 QNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
              :  |  | | ||| |: |:  :|||| |    | | :::|:|  |||||||| :  |
Db        117 NSYGEVKVKLIVLVPPSKPTVNIPSSATIGNRAVLTCSEQDGSPPSEYTWFKDGIVMPTN 176

Qy        179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNI 237
              |:     :|||| :|  || | |: :|  |||||||||||  |         ||:  : |:
Db        177 PKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEYSCEARNGYGTPMTSNAVRMEAVERNV 236

Qy        238 SGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSE 287
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              |:|||:|  ::: :   |: :|  :|:| :     |  :|||    |:
Db        237 GVIVAAVLVTLILLGILVFGIWFAYSRGHFDR----TKKGTSSKKVIYSQ 282


RESULT 2
JC7780
coxsackie- and adenovirus receptor - bovine
C;Species: Bos primigenius taurus (cattle)
C;Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 09-Jul-2004
C;Accession: JC7780
R;Thoelen, I.; Keyaerts, E.; Lindberg, M.; Van Ranst, M.
Biochem. Biophys. Res. Commun. 288, 805-808, 2001
A;Title: Characterization of a cDNA encoding the bovine coxsackie and adenovirus recepto
A;Reference number: JC7780
A;Contents: Liver
A;Accession: JC7780
A;Molecule type: mRNA
A;Residues: 1-365 <THO>
A;Cross-references: UNIPROT:Q8WMV3; UNIPARC:UPI00000889CD; GB:AY033651
C;Comment: This protein serves as the primary adenoviral attachment site on bovine cells

  Query Match            12.9%;  Score 206.5;  DB 2;  Length 365;
  Best Local Similarity  24.3%;  Pred. No. 9.3e-09;
  Matches   80;  Conservative   49;  Mismatches  135;  Indels   65;  Gaps   11;

Qy         12 LLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACK---TPKKTVSSRLEW----- 63
              ||||:|::       | |    :|::   : : | | ||    |:       :||
Db          3 LLLRFLLLCGVADFTRGLSITTPEQMIEKAKGETAYLPCKFTLGPEDQGPLDIEWLLSPA 62

Qy         64 --KKL--------GRSVSFVYYQQTLQGDFKNRAEMI-------DFNIRIKNVTRSDAGK 106
                :|:        |  :   |||     | | |           | :| : |:  || |
Db         63 DNQKVDQVIILYSGDKIYDDYYQ-----DLKGRVHFTSNDLKSGDASINVTNLQLSDIGT 117

Qy        107 YRCEV-SAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPE 165
              |:|:|  ||    : ::     | ||| |:   | | |   |   :|:|: |||:
Db        118 YQCKVKKAPGVGNKKIQ-----LTVLVKPSGIRCYVDGSEEIGNDFKLKCEPKEGSLPLR 172

Qy        166 YTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRC 225
              | | |          ||   :|:     :  :     |   :| |:|  || ||  :|
Db        173 YEWQK---------LSDSQKLPTSWLPEMTSPVISVKNASAEYSGTYTCTVRNRVGSDQC 223

Qy        226 --------PGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQ--- 274
                     |  |       : | : |:|::||::  |       :|:  : ||
Db        224 LLRLDVVPPSNRAGTIAGAVIGTLLALVLIALIVFCCH----KKRREEKYEKEVHHDIRE 279

Qy        275 -----KSNSSSKATTMSENVQWLTPVIPA 298
                  || :|:  : :  |   |  : |:
Db        280 DVPPPKSRTSTARSYIGSNHSSLGSMSPS 308


RESULT 3
A41054
fasciclin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 09-Jul-2004
C;Accession: A41054
R;Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A;Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A;Reference number: A41054; MUID:92005695; PMID:1913818
A;Accession: A41054
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-811 <GRE>
A;Cross-references: UNIPROT:P34082; UNIPARC:UPI000002A963; GB:M77165; NID:g157402; PID:g
C;Genetics:
A;Gene: FlyBase:Fas2
A;Cross-references: FlyBase:FBgn0000635
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: membrane protein

  Query Match            11.5%;  Score 184;  DB 2;  Length 811;
  Best Local Similarity  27.2%;  Pred. No. 1.5e-06;
  Matches   53;  Conservative   37;  Mismatches   75;  Indels   30;  Gaps    8;

Qy         30 SAPKDQQVVTAVEYQEAILACKTPKKTVSSRLEWKKLG---RSVSFVYYQQTLQGDFKNR 86
              :||::|      :|   :: |:  |   :  ::| : |   |: :  |  ||
Db        142 NAPENQYPTLGQDY---VVMCEV-KADPNPTIDWLRNGDPIRTTNDKYVVQT-------- 189

Qy         87 AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSAL 146
                    : |:||  || | | |  :|  | |: ||  |: :|| : | : |      |:
Db        190 -----NGLLIRNVQESDEGIYTCR-AAVIETGELLER-TIRVEVFIQPEIISLPTNLEAV 242

Qy        147 SGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSK 206
              |      |  : | | || :| :|  :|       : :|   : :| :|| :  ::||:
Db        243 EGKPFAANCTAR-GKPVPEISWIRDATQL-------NVATADRFQVNPQTGLVTISSVSQ 294

Qy        207 LDTGEYSCEARNSVG 221
              | | |:| |:|  |
Db        295 DDYGTYTCLAKNRAG 309


RESULT 4
B41054
fasciclin II PI-linked splice form precursor - fruit fly (Drosophila melanogaster)
C;Species: Drosophila melanogaster
C;Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C;Accession: B41054
R;Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A;Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A;Reference number: A41054; MUID:92005695; PMID:1913818
A;Accession: B41054
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-873 <GRE>
A;Cross-references: UNIPARC:UPI0000177B17; GB:M77166
C;Genetics:
A;Gene: FlyBase:Fas2
A;Cross-references: FlyBase:FBgn0000635
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: transmembrane protein

  Query Match            11.5%;  Score 184;  DB 2;  Length 873;
  Best Local Similarity  27.2%;  Pred. No. 1.6e-06;
  Matches   53;  Conservative   37;  Mismatches   75;  Indels   30;  Gaps    8;

Qy         30 SAPKDQQVVTAVEYQEAILACKTPKKTVSSRLEWKKLG---RSVSFVYYQQTLQGDFKNR 86
              :||::|      :|   :: |:  |   :  ::| : |   |: :  |  ||
Db        142 NAPENQYPTLGQDY---VVMCEV-KADPNPTIDWLRNGDPIRTTNDKYVVQT-------- 189

Qy         87 AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSAL 146
                    : |:||  || | | |  :|  | |: ||  |: :|| : | : |      |:
Db        190 -----NGLLIRNVQESDEGIYTCR-AAVIETGELLER-TIRVEVFIQPEIISLPTNLEAV 242

Qy        147 SGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSK 206
              |      |  : | | || :| :|  :|       : :|   : :| :|| :  ::||:
Db        243 EGKPFAANCTAR-GKPVPEISWIRDATQL-------NVATADRFQVNPQTGLVTISSVSQ 294

Qy        207 LDTGEYSCEARNSVG 221
              | | |:| |:|  |
Db        295 DDYGTYTCLAKNRAG 309


RESULT 5
T29757
protein UNC-89 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 03-Dec-1999
C;Accession: T29757
R;Du, Z.; Le, T.T.; Wilson, R.
submitted to the EMBL Data Library, May 1997
A;Description: The sequence of C. elegans cosmid C09D1.
A;Reference number: Z20679
A;Accession: T29757
A;Status: preliminary; translated from GB/EMBL/DDBJ
```

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A;Molecule type: DNA
A;Residues: 1-6642 <DUZ>
A;Cross-references: UNIPARC:UPI000017CF3C; EMBL:AF003131; PIDN:AAB54132.1; GSPDB:GN00019
A;Experimental source: strain Bristol N2; clone C09D1
C;Genetics:
A;Gene: CESP:unc-89
A;Map position: 1
A;Introns: 17/2; 108/3; 154/2; 211/2; 265/3; 326/2; 352/3; 426/2; 454/1; 500/1; 537/1; 6
/3; 5917/1; 6027/1; 6061/3; 6153/2; 6515/1; 6552/3; 6609/1

  Query Match             11.0%;  Score 177;  DB 2;  Length 6642;
  Best Local Similarity   28.6%;  Pred. No. 6.7e-05;
  Matches   62;  Conservative   29;  Mismatches   74;  Indels   52;  Gaps   11;

Qy         28 GFSAPKDQQVV---TAVEYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFK 84
              |  ||:  :::   |  | |:||| ||  |     :::| | |: |           :
Db       3823 GRGAPEFVELLRSCTVTEKQQAILKCKV-KGEPRPKIKWTKEGKEVEM---------SAR 3872

Qy         85 NRAEMID---FNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEV 141
              |||  |     :  |||:|||:|||| | :| |   |  : : :  || :   |
Db       3873 VRAEHKDDGTLTLTFDNVTQADAGEYRCE--AENEYGSAWTEGPIIVTLEGAPKIDG-EA 3929

Qy        142 P--------------SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQST 186
              |             :: | | :         | | |   |:|:|  |  : |:  :
Db       3930 PDFLQPVKPAVVTVGETAVLEGKI--------SGKPKPSVKWYKNGEELKPSDRVKIE-- 3979

Qy        187 NSSYTMNTKTGTLQFN-TVSKL-DTGEYSCEARNSVG 221
                |  || :   | :|| |  || ||| |  |
Db       3980 ------NLDDGTQRLTVTNAKLDDMDEYRCEASNEFG 4010


RESULT 6
I38346
elastic titin - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C;Accession: I38346
R;Labeit, S.; Kolmerer, B.
Science 270, 293-296, 1995
A;Title: Titins: giant proteins in charge of muscle ultrastructure and elasticity.
A;Reference number: A57430; MUID:96026330; PMID:7569978
A;Accession: I38346
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-7962 <RES>
A;Cross-references: UNIPROT:Q10465; UNIPARC:UPI000011010C; EMBL:X90569; NID:g1017426; PI
C;Genetics:
A;Gene: GDB:TTN
A;Cross-references: GDB:127867; OMIM:188840
A;Map position: 2q31-2q31

  Query Match             10.6%;  Score 169.5;  DB 2;  Length 7962;
  Best Local Similarity   28.6%;  Pred. No. 0.00032;
  Matches   55;  Conservative   31;  Mismatches   67;  Indels   39;  Gaps    7;

Qy         40 AVEYQEAILACKTPKKTVSSRLEWKKLGRSV------SFVYYQQTLQGDFKNRAEMIDFN 93
              :||  ::|:   |   |:   : ||| | ::      : |  ::|
Db       2661 SVEPGKSIILESTYTGTLPISVTWKKDGFNITTSEKCNIVTTEKTC----------I 2707

Qy         94 IRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEV----PSSALSGT 149
              : | | |: |||:| ||:   :| |:::          ||:   |   |   |  |  |
Db       2708 LEILNSTKRDAGQYSCEIE--NEAGRDV------CGALVSTLEPPYFVTELEPLEAAVGD 2759

Qy        150 VVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDT 209
              | |:||   | |    :|:|   :|   |   :  ||:         || || |:  |:
Db       2760 SVSLQCQ-VAGTPEITVSWYKGDTKLRPTPEYRTYFTNN-------VATLVFNKVNINDS 2811

Qy        210 GEYSCEARNSVG 221
              |||:|:| ||:|
Db       2812 GEYTCKAENSIG 2823


RESULT 7
JE0100
neural cell adhesion molecule 2 - African clawed frog
N;Alternate names: N-CAM 2
C;Species: Xenopus laevis (African clawed frog)
C;Date: 19-May-1998 #sequence_revision 29-May-1998 #text_change 09-Jul-2004
C;Accession: JE0100
R;Kudo, M.; Takayama, E.; Tadakuma, T.; Shiokawa, K.
Biochem. Biophys. Res. Commun. 245, 127-132, 1998
A;Title: Molecular cloning of ssd-form neural cell adhesion molecules (N-CAMs) as the ma
A;Reference number: JE0099; MUID:98204770; PMID:9535795
A;Accession: JE0100
A;Molecule type: mRNA
A;Residues: 1-725 <KUD>
A;Cross-references: UNIPROT:O73634; UNIPARC:UPI00000FD757; DDBJ:AB008163; NID:g3116228;
A;Experimental source: heart
C;Comment: This protein mediates and regulates various cell-cell interactions through bo
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
F;413-475/Domain: immunoglobulin homology <IMM>
F;512-589/Domain: fibronectin type III repeat homology <3FR>

  Query Match             10.1%;  Score 162;  DB 2;  Length 725;
  Best Local Similarity   27.1%;  Pred. No. 7e-05;
  Matches   56;  Conservative   37;  Mismatches   98;  Indels   16;  Gaps    8;

Qy         29 FSAPKDQQV--VTAVEYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFKNR 86
              :: ||   |   ||||  |  | |:     : | : |:   |::|    ::|| |    :
Db       300 YAKPKITYVENKTAVELDEITLTCEASGDPIPS-ITWRTAHRNIS--SEEKTLDGHIVVK 356

Qy         87 AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSAL 146
                 :   : :|::  :|||:| |  | |      ::   :  ||  || :    |
Db       357 DHIRMSALTLKDIQYTDAGEYFCVASNPI----GVDMQAMYFEVQYAPKIRG-PVVVYTW 411

Qy        147 SGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSK 206
              |  | : | |   :|:   :||:|| :|| :    |  :|        :|: |  |:
Db       412 EGNPVNITC-DVLAHPSAAVSWFRDG-QLLPS----SNFSNIKIYNGPTFSSLEVNPDSE 465

Qy        207 LDTGEYSCEARNSVGYRRCPGKRMQVD 233
              | | |:| | ||:|:       :| |
Db       466 NDFGNYNCSAVNSIGHESSEFILVQAD 492


RESULT 8
A41228
protein-tyrosine kinase (EC 2.7.1.112) Flk-1 precursor, endothelial cell-specific recept
C;Species: Mus musculus (house mouse)
C;Date: 19-Jun-1992 #sequence_revision 19-Jun-1992 #text_change 31-Dec-2004
C;Accession: A41228; A46065; I58365; S18832; S29991
R;Matthews, W.; Jordan, C.T.; Gavin, M.; Jenkins, N.A.; Copeland, N.G.; Lemischka, I.R.
Proc. Natl. Acad. Sci. U.S.A. 88, 9026-9030, 1991
A;Title: A receptor tyrosine kinase cDNA isolated from a population of enriched primitiv
A;Reference number: A41228; MUID:92020984; PMID:1717995
A;Accession: A41228
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-1367 <MAT>
A;Cross-references: UNIPROT:P35918; UNIPARC:UPI0000028D93; GB:X59397; NID:g50976; PIDN:C
R;Millauer, B.; Wizigmann-Voos, S.; Schnurch, H.; Martinez, R.; Moller, N.P.; Risau, W.;
Cell 72, 835-846, 1993
A;Title: High affinity VEGF binding and developmental expression suggest Flk-1 as a majo
A;Reference number: A46065; MUID:93208880; PMID:7681362
A;Accession: A46065
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-24,'T',26-782,'VL',785-916,'C',918-1367 <MIL>
A;Cross-references: UNIPARC:UPI000003CA97; GB:X70842; NID:g57923; PIDN:CAA50192.1; PID:g
A;Note: submitted to the EMBL Data Library, January 1993
A;Note: sequence extracted from NCBI backbone (NCBIP:128064)
R;Oelrichs, R.B.; Reid, H.H.; Bernard, O.; Ziemiecki, A.; Wilks, A.F.
Oncogene 8, 11-18, 1993
A;Title: NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E10 embryo
A;Reference number: I58365; MUID:93141255; PMID:8423988
A;Accession: I58365
A;Status: preliminary; translated from GB/EMBL/DDBJ
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A;Molecule type: mRNA
A;Residues: 1-678,'D',680-1340,'RSPPV' <OEL>
A;Cross-references: UNIPARC:UPI0000170C47; GB:S53103; NID:g264004; PIDN:AAB25043.1; PID:
C;Genetics:
A;Gene: FLK-1; NYK
C;Keywords: ATP; autophosphorylation; phosphoprotein; phosphotransferase; transmembrane
F;830-1165/Domain: protein kinase homology <KIN>
F;838-846/Region: protein kinase ATP-binding motif

  Query Match            10.1%;  Score 162;  DB 2;  Length 1367;
  Best Local Similarity   24.7%;  Pred. No. 0.00015;
  Matches   55;  Conservative   23;  Mismatches   81;  Indels   64;  Gaps    7;

Qy         35 QQVVTAVEYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFN- 93
              |    | :   | |   : |  : | | |||   : |:  ::|    ||   :   |
Db        554 QPAAQPTEQESVSLLCTADRNTFEN-LTWYKLGSQATSVHMGESLTPVCKNLDALWKLNG 612

Qy         94 ------------IRIKNVTRSDAGKYRC--------------------EVSAPSEQGQNL 121
                        :  :| :  | | | |                    |  ||   | ||
Db        613 TMFSNSTNDILIVAFQNASLQDQGDYVCSAQDKKTKKRHCLVKQLIILERMAPMITG-NL 671

Qy        122 EEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRL 181
              |  | |:              |  :|: |    ||| |  |||||   |:|:  :
Db        672 ENQTTTI------------------GETIEVTC-PASGNPTPHITWFKDNETLVEDSGI 711

Qy        182 GSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRR 224
              :  | : |:          | | | | |:|:| | :|  |
Db        712 VLRDGNRNLTI---------RRVRKEDGGLYTCQACNVLGCAR 745


RESULT 9
A27681
nonspecific cross-reacting antigen precursor - human
N;Alternate names: NCA; TEX/NCA
C;Species: Homo sapiens (man)
C;Date: 31-Mar-1989 #sequence_revision 16-Sep-1992 #text_change 09-Jul-2004
C;Accession: A26902; A29875; A27681; B31037; A29918; A27709; A36271; C26414; E44476; F44
R;Oikawa, S.; Kosaki, G.; Nakazato, H.
Biochem. Biophys. Res. Commun. 146, 464-469, 1987
A;Title: Molecular cloning of a gene for a member of carcinoembryonic antigen (CEA) gene
A;Reference number: A26902; MUID:87298464; PMID:3619891
A;Accession: A26902
A;Molecule type: DNA
A;Residues: 1-141 <OIK>
A;Cross-references: UNIPROT:Q13774; UNIPARC:UPI0000072416; GB:M17082; NID:g180230; PIDN:
R;Thompson, J.A.; Pande, H.; Paxton, R.J.; Shively, L.; Padma, A.; Simmer, R.L.; Todd, C
Proc. Natl. Acad. Sci. U.S.A. 84, 2965-2969, 1987
A;Title: Molecular cloning of a gene belonging to the carcinoembryonic antigen gene fami
A;Reference number: A29875; MUID:87204248; PMID:3033672
A;Accession: A29875
A;Molecule type: DNA
A;Residues: 23-141 <THO>
A;Cross-references: UNIPARC:UPI0000177070; GB:M16337
A;Note: the authors translated the codon ACT for residue 64 as Tyr
R;Tawaragi, Y.; Oikawa, S.; Matsuoka, Y.; Kosaki, G.; Nakazato, H.
Biochem. Biophys. Res. Commun. 150, 89-96, 1988
A;Title: Primary structure of nonspecific crossreacting antigen (NCA), a member of carci
A;Reference number: A27681; MUID:88106638; PMID:3337731
A;Accession: A27681
A;Molecule type: mRNA
A;Residues: 1-238,'V',240-344 <TAW>
A;Cross-references: UNIPARC:UPI000012748C; GB:M18728; NID:g189084; PIDN:AAA59907.1; PID:
R;Barnett, T.; Goebel, S.J.; Nothdurft, M.A.; Elting, J.J.
Genomics 3, 59-66, 1988
A;Title: Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and C
A;Reference number: A31037; MUID:89122014; PMID:3220478
A;Accession: B31037
A;Molecule type: mRNA
A;Residues: 1-137,'L',139-344 <BAR>
A;Cross-references: UNIPARC:UPI000016ADC6; GB:M29541; NID:g189103; PIDN:AAA59915.1; PID:
A;Note: the authors translated the codon TTG for residue 138 as Phe
R;Neumaier, M.; Zimmermann, W.; Shively, L.; Hinoda, Y.; Riggs, A.D.; Shively, J.E.
J. Biol. Chem. 263, 3202-3207, 1988
A;Title: Characterization of a cDNA clone for the nonspecific cross-reacting antigen (NC
A;Reference number: A29918; MUID:88139389; PMID:2830274
A;Accession: A29918
A;Molecule type: mRNA
A;Residues: 1-344 <NEU>
A;Cross-references: UNIPARC:UPI000006DF42; GB:M18216; GB:J03550; NID:g178690; PIDN:AAA51
R;Grunert, F.; Kolbinger, F.; Schwarz, K.; Schwaibold, H.; von Kleist, S.
Biochem. Biophys. Res. Commun. 153, 1105-1115, 1988
A;Title: Protein analysis of NCA-50 shows identity to NCA cDNA deduced sequences and ind
A;Reference number: A27709; MUID:88268882; PMID:3390172
A;Accession: A27709
A;Molecule type: protein
A;Residues: 35-95;99-120;123-138;149-151,'X',153-162;166,'X',168-172,'X',174-193;231-235
A;Cross-references: UNIPARC:UPI0000177071; UNIPARC:UPI0000177072; UNIPARC:UPI0000177073;
078; UNIPARC:UPI0000177079; UNIPARC:UPI000017707A
R;Hefta, S.A.; Paxton, R.J.; Shively, J.E.
J. Biol. Chem. 265, 8618-8626, 1990
A;Title: Sequence and glycosylation site identity of two distinct glycoforms of nonspeci
A;Reference number: A36271; MUID:90256782; PMID:2341397
A;Accession: A36271
A;Molecule type: protein
A;Residues: 35-42;44-53;55-80;83-134;139-160;166-172;174-180;191-194,204-224;233-308;310
A;Cross-references: UNIPARC:UPI000017707B; UNIPARC:UPI000017707C; UNIPARC:UPI000017707D;
082; UNIPARC:UPI0000177083; UNIPARC:UPI0000177084
R;Paxton, R.J.; Mooser, G.; Pande, H.; Lee, T.D.; Shively, J.E.
Proc. Natl. Acad. Sci. U.S.A. 84, 920-924, 1987
A;Title: Sequence analysis of carcinoembryonic antigen: identification of glycosylation
A;Reference number: A26414; MUID:87147209; PMID:3469650
A;Accession: C26414
A;Molecule type: protein
A;Residues: 35-69 <PAX>
A;Cross-references: UNIPARC:UPI0000177085
R;Khan, W.N.; Fraengsmyr, L.; Teglund, S.; Israelsson, A.; Bremer, K.; Hammarstroem, S.
Genomics 14, 384-390, 1992
A;Title: Identification of three new genes and estimation of the size of the carcinoembr
A;Reference number: A44476; MUID:93052339; PMID:1427854
A;Accession: E44476
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 35-141 <KHA>
A;Cross-references: UNIPARC:UPI0000177086
A;Accession: F44476
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 35-137,'L',139-141 <KH2>
A;Cross-references: UNIPARC:UPI0000177086
C;Comment: This protein appears to be processed at the carboxyl terminus and anchored th
C;Genetics:
A;Gene: GDB:NCA
A;Cross-references: GDB:120221; OMIM:163980
A;Map position: 19q13.2-19q13.2
A;Introns: 22/1
A;Note: the list of introns may be incomplete
C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-termin
C;Keywords: blocked carboxyl end; glycoprotein; lipoprotein; membrane protein; phosphati
F;1-138/Domain: carcinoembryonic antigen precursor amino-terminal homology <CEAN>
F;1-34/Domain: signal sequence #status predicted <SIG>
F;35-320/Product: nonspecific cross-reacting antigen #status experimental <MAT>
F;160-217/Domain: immunoglobulin homology <IMM1>
F;252-301/Domain: immunoglobulin homology <IMM2>
F;321-344/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F;104,111,115,152,173,197,224,256,274,288,292/Binding site: carbohydrate (Asn) (covalent
F;309/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;320/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Gly) (in mature form

  Query Match            10.0%;  Score 161;  DB 2;  Length 344;
  Best Local Similarity   26.5%;  Pred. No. 3.4e-05;
  Matches   58;  Conservative   33;  Mismatches   84;  Indels   44;  Gaps   10;

Qy         41 VEYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVT 100
              || ::|:     |:   :: | |   |:|:       |   |          :  : : :|
Db        157 VEDKDAVAFTCEPEVQNTTYLWWVN-GQSLPVSPRLQLSNG---------NMTLTLLSVK 206
```

```
Qy        101 RSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSA--LSGTVVELRCQDK 158
              |:||| | ||:  |:   ::   | ||| ||  |  |:   || |    |  : | |
Db        207 RNDAGSYECEIQNPASANRS---DPVTLNVLYGPDGPTIS-PSKANYRPGENLNLSCH-A 261

Qy        159 EGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARN 218
                ||  :|:|| :|                    |    | |    ::  ::| | |:| |
Db        262 ASNPPAQYSWFING-----------------TFQQSTQELFIPNITVNNSGSYMCQAHN 303

Qy        219 SVGYRRCPG-KRMQVDDLNISG---IIAAVVVVALVISV 253
              |       |  |  |  : :||   :::||  | : | |
Db        304 S-----ATGLNRTTVTMITVSGSAPVLSAVATVGITIGV 337


RESULT 10
JN0635
neural cell adhesion molecule 2 precursor - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 09-Jul-2004
C;Accession: JN0635
R;Tonissen, K.F.; Krieg, P.A.
Gene 127, 243-247, 1993
A;Title: Two neural-cell adhesion molecule(NCAM)-encoding genes in Xenopus laevis are ex
A;Reference number: JN0635; MUID:93273239; PMID:7684721
A;Accession: JN0635
A;Molecule type: mRNA
A;Residues: 1-1092 <TON>
A;Cross-references: UNIPROT:P36335; UNIPARC:UPI000012FDC7; GB:M76710; NID:g214611; PIDN:
C;Comment: NCAM mediates cell-cell adhesion via homophilic binding with another NCAM mol
C;Genetics:
A;Gene: NCAM2
C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C;Keywords: alternative splicing; cell adhesion; duplication; heparin binding; sialoglyc
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-1092/Product: neural cell adhesion molecule 2 #status predicted <NCA>
F;20-705/Domain: extracellular #status predicted <EXT>
F;34-95/Domain: immunoglobulin homology <IMM1>
F;129-188/Domain: immunoglobulin homology <IMM2>
F;149-153/Region: heparin binding #status predicted
F;158-162/Region: heparin binding #status predicted
F;317-381/Domain: immunoglobulin homology <IMM3>
F;413-475/Domain: immunoglobulin homology <IMM4>
F;512-589/Domain: fibronectin type III repeat homology <FN3A>
F;619-680/Domain: fibronectin type III repeat homology <FN3B>
F;706-723/Domain: transmembrane #status predicted <TMM>
F;724-1092/Domain: intracellular #status predicted <INT>
F;41-93,136-186,232-282,323-379,420-473/Disulfide bonds: #status predicted
F;219,310,341,417,443,472/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             9.8%;  Score 158;  DB 1;  Length 1092;
  Best Local Similarity   26.6%;  Pred. No. 0.00024;
  Matches   55;  Conservative   37;  Mismatches   99;  Indels   16;  Gaps    8;

Qy         29 FSAPKDQQV--VTAVEYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFKNR 86
              :: ||    |   | ||  |  | |:     : | : |:   |::|    ::|| |    :
Db        300 YAKPKMTYVENKTTVELDEITLTCEASGDPIPS-ITWRTAHRNIS--SEEKTLDGHIVVK 356

Qy         87 AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSAL 146
                 :    : :|::  :|||:| |  | |      ::   :  ||  || :    |
Db        357 DHIRMSALTLKDIQYTDAGEYFCVASNPI----GVDMQAMYFEVQYAPKIRG-PVVVYTW 411

Qy        147 SGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSK 206
              |  | : | |   :|:   :||:|| :|| :    | :|           :|: |  |:
Db        412 EGNPVNITC-DVLAHPSAAVSWFRDG-QLLPS----SNFSNIKIYNGPTFSSLEVNPDSE 465

Qy        207 LDTGEYSCEARNSVGYRRCPGKRMQVD 233
              | | |:| | ||:|:       :| |
Db        466 NDFGNYNCSAVNSIGHESSEFILVQAD 492


RESULT 11
JC5702
ErbB kinase activator alpha2a, brain and thymus - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 09-Jul-2004
C;Accession: JC5702; PC4417
R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyag
J. Biochem. 122, 675-680, 1997
A;Title: A novel brain-derived member of the epidermal growth factor family that interac
A;Reference number: JC5700; MUID:98006324; PMID:9348101
A;Accession: JC5702
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-860 <HIG>
A;Cross-references: UNIPROT:O35569; UNIPARC:UPI000002AFB5; DDBJ:D89996; NID:g2605631; PI
A;Experimental source: PC-12 cell
A;Accession: PC4417
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 'F',212-213,223-860 <HI2>
A;Cross-references: UNIPARC:UPI000017062D; DDBJ:AB001576; NID:g2605478; PIDN:BAA23348.1;
A;Experimental source: PC-12 cell
C;Comment: This protein is a member of the epidermal growth factor family. It is functio
ating the differentiation of MDA-MB-453 cells.
C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunc
C;Keywords: glycoprotein
F;274-327/Domain: Ig-like #status predicted <IGL>
F;361-397/Domain: EGF homology <EGF>
F;422-444/Domain: hydrophobic #status predicted <HYD>
F;163,294,467/Binding site: carbohydrate (Asn) (covalent) #status predicted

  Query Match             9.8%;  Score 157;  DB 2;  Length 860;
  Best Local Similarity   27.7%;  Pred. No. 0.00021;
  Matches   56;  Conservative   24;  Mismatches   86;  Indels   36;  Gaps    8;

Qy         66 LGRSVSFVYYQQTLQGD--FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEE 123
              | |:  :::: :  :    ||     :| |   ||: : : ||  |    |   : : ::
Db        204 LERNQRYIFFLEPTEQPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKKMKS 260

Qy        124 DTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 183
              |  :                   |    |:|:   ||| | | |||||  |       |
Db        261 QTGEV-----------------GEKQSLKCEAAAGNPQPSYRWFKDGKELNR-----S 296

Qy        184 QSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNI-----S 238
              :     |    |   ||||  |   | ||| ||| | :|     | |: |: ::     |
Db        297 RDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNSVSTTLSSWS 355

Qy        239 GIIAAVVVVALVISVCGLGVCY 260
              |       |   | | ||||
Db        356 GHARKCNETAKSYCVNG-GVCY 376


RESULT 12
JC5701
ErbB kinase activator alpha1, brain and thymus - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 09-Jul-2004
C;Accession: JC5701; PC4411
R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyag
J. Biochem. 122, 675-680, 1997
A;Title: A novel brain-derived member of the epidermal growth factor family that interac
A;Reference number: JC5700; MUID:98006324; PMID:9348101
A;Accession: JC5701
A;Molecule type: mRNA
A;Residues: 1-868 <HIG>
A;Cross-references: UNIPROT:O35569; UNIPARC:UPI0000130508; DDBJ:D89995; NID:g2605629; PI
A;Accession: PC4411
A;Molecule type: protein
A;Residues: 128-162 <HI2>
A;Cross-references: UNIPARC:UPI0000179297
A;Experimental source: PC-12 cell
C;Comment: This protein is a member of the epidermal growth factor family. It is functio
ating the differentiation of MDA-MB-453 cells.
C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunc
F;361-397/Domain: EGF homology <EGF>

  Query Match             9.8%;  Score 157;  DB 2;  Length 868;
```

```
  Best Local Similarity   27.7%;  Pred. No. 0.00021;
  Matches   56;  Conservative   24;  Mismatches   86;  Indels   36;  Gaps    8;

Qy         66 LGRSVSFVYYQQTLQGD--FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEE 123
              | |:  :::: :  :     ||      :| |   ||: : : || |    |    : : ::
Db        204 LERNQRYIFFLEPTEQPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKKMKS 260

Qy        124 DTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 183
              |  :                 |   |:|:   ||| | | |||||  |        |
Db        261 QTGEV------------------GEKQSLKCEAAAGNPQPSYRWFKDGKELNR-----S 296

Qy        184 QSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNI-----S 238
              :     |    |   |||| |   | ||| ||| | :|     | |: |: ::      |
Db        297 RDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNSVSTTLSSWS 355

Qy        239 GIIAAVVVVALVISVCGLGVCY 260
              |         |    | | ||||
Db        356 GHARKCNETAKSYCVNG-GVCY 376


RESULT 13
TDHULK
leukocyte antigen-related protein precursor - human
N;Alternate names: leukocyte common antigen homolog
N;Contains: protein-tyrosine-phosphatase (EC 3.1.3.48)
C;Species: Homo sapiens (man)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
C;Accession: S03841; JL0051
R;Streuli, M.; Krueger, N.X.; Hall, L.R.; Schlossman, S.F.; Saito, H.
J. Exp. Med. 168, 1523-1530, 1988
A;Title: A new member of the immunoglobulin superfamily that has a cytoplasmic region ho
A;Reference number: JL0051; MUID:89035978; PMID:2972792
A;Accession: S03841
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-1897 <STR>
A;Cross-references: UNIPROT:P10586; UNIPARC:UPI0000132992; EMBL:Y00815; NID:g34266; PIDN
C;Genetics:
A;Gene: GDB:PTPRF; LAR
A;Cross-references: GDB:120138; OMIM:179590
A;Map position: 1p34-1p34
C;Superfamily: leukocyte antigen-related protein; fibronectin type III repeat homology;
ogy
C;Keywords: glycoprotein; phosphoprotein; phosphoric monoester hydrolase; transmembrane
F;1-16/Domain: signal sequence #status predicted <SIG>
F;17-1897/Product: leukocyte antigen-related protein #status predicted <MAT>
F;17-1250/Domain: extracellular #status predicted <EXT>
F;37-99/Domain: immunoglobulin homology <IMM1>
F;139-199/Domain: immunoglobulin homology <IMM2>
F;236-290/Domain: immunoglobulin homology <IMM3>
F;308-390/Domain: fibronectin type III repeat homology <FN3A>
F;403-489/Domain: fibronectin type III repeat homology <FN3B>
F;501-583/Domain: fibronectin type III repeat homology <FN3C>
F;596-685/Domain: fibronectin type III repeat homology <FN3D>
F;698-798/Domain: fibronectin type III repeat homology #status atypical <FN3E>
F;810-893/Domain: fibronectin type III repeat homology <FN3F>
F;905-989/Domain: fibronectin type III repeat homology <FN3G>
F;1001-1078/Domain: fibronectin type III repeat homology <FN3H>
F;1251-1274/Domain: transmembrane #status predicted <TMM>
F;1275-1897/Domain: intracellular #status predicted <INT>
F;1285-1897/Domain: leukocyte common antigen cytosolic domain homology <LAC>
F;1365-1586/Domain: protein-tyrosine-phosphatase homology <PTP1>
F;1654-1877/Domain: protein-tyrosine-phosphatase homology <PTP2>
F;44-97,146-197,243-288/Disulfide bonds: #status predicted
F;107,240,285,711,956/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;1538/Active site: Cys (phosphocysteine intermediate) #status predicted
F;1544/Binding site: substrate phosphate (Arg) #status predicted
F;1829/Active site: Cys (phosphocysteine intermediate) #status predicted
F;1835/Binding site: substrate phosphate (Arg) #status predicted

  Query Match             9.7%;  Score 156;  DB 1;  Length 1897;
  Best Local Similarity   25.8%;  Pred. No. 0.00066;
  Matches   59;  Conservative   35;  Mismatches   89;  Indels   46;  Gaps   10;

Qy         11 LLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKT---PKKTVSSRLEWKKLG 67
              |::|  :  | |  |      |:||   | :    |   |:    ||      |: | | |
Db          8 LVMLGLVAGAHGDSKPVFIKVPEDQ---TGLSGGVASFVCQATGEPK----PRITWMKKG 60

Qy         68 RSVSFVYYQQTLQGDFKNRAEMIDFN------IRIKNV-TRSDAGKYRCEVSAPSEQGQN 120
              : ||               | |:|:|:      :||: :  : |   | |  :    :
Db         61 KKVS------------SQRFEVIEFDDGAGSVLRIQPLRVQRDEAIYECTATNSLGEINT 108

Qy        121 LEEDTVTLEVLVAPAVPSCE------VPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIR 174
                : :|  |  : |  || :       |   | : |::   |    ||| || :|||| :
Db        109 SAKLSVLEEEQLPPGFPSIDMGPQLKVVEKARTATML---CA-AGGNPDPEISWFKDFLP 164

Qy        175 LLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYR 223
              :          :|::     ::| ||  :  : | |:| | | || | |
Db        165 V-------DPATSNGRIKQLRSGALQIESSEESDQGKYECVATNSAGTR 206


RESULT 14
T23007
hypothetical protein K09C8.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T23007; T23543
R;Kershaw, J.
submitted to the EMBL Data Library, November 1995
A;Reference number: Z19651
A;Accession: T23007
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-1328 <WIL>
A;Cross-references: UNIPROT:Q21043; UNIPARC:UPI00000823FD; EMBL:Z68005; PIDN:CAA91994.1;
A;Experimental source: clone F59F3
R;Kershaw, J.
submitted to the EMBL Data Library, November 1995
A;Reference number: Z19755
A;Accession: T23543
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-1328 <WI2>
A;Cross-references: UNIPARC:UPI00000823FD; EMBL:Z68006; PIDN:CAA91999.1; GSPDB:GN00028;
A;Experimental source: clone K09C8
C;Genetics:
A;Gene: CESP:K09C8.5
A;Map position: X
A;Introns: 34/1; 85/3; 133/3; 182/2; 220/3; 262/2; 390/3; 442/2; 493/3; 563/2; 586/3; 61

  Query Match             9.7%;  Score 155.5;  DB 2;  Length 1328;
  Best Local Similarity   27.5%;  Pred. No. 0.00047;
  Matches   42;  Conservative   34;  Mismatches   66;  Indels   11;  Gaps    4;

Qy         69 SVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTL 128
              :::::: :| |    |::       ::|     :| |:| |  |   |   ::   :|:|
Db        382 TITWLPEKQKLTESRKHKLTKNGSVLKIFPFLNTDIGQYECVASNGEESKSHI--FSVSL 439

Qy        129 EVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNS 188
              :    | :    : ::|  |  | |||  | | | |:  |  :|||:   ||      |:
Db        440 KESEQPVIIDAPMDTNATIGQQVTLRCNAK-GFPVPDVVWLFEGIRI---PR-----RNT 490

Qy        189 SYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVG 221
                ||::     |    |:: |:| ::|:| ||||
Db        491 RYTISDNNIELTIEKVTRHDSGVFTCQAVNSVG 523


RESULT 15
T34416
hypothetical protein F12F3.2 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 29-Oct-1999
C;Accession: T34416
R;Fulton, B.; Wohldmann, P.
submitted to the EMBL Data Library, July 1998
A;Description: The sequence of C. elegans cosmid F12F3.
```

```
A;Reference number: Z21521
A;Accession: T34416
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-2783 <FUL>
A;Cross-references: UNIPARC:UPI000017B8E5; EMBL:U80022; PIDN:AAC25886.1; GSPDB:GN00023;
A;Experimental source: strain Bristol N2; clone F12F3
C;Genetics:
A;Gene: CESP:F12F3.2
A;Map position: 5
A;Introns: 45/3; 90/3; 451/3; 509/1; 2313/3; 2341/3; 2378/3; 2414/2; 2453/3; 2474/2; 252

  Query Match             9.7%;  Score 155.5;  DB 2;  Length 2783;
  Best Local Similarity   30.4%;  Pred. No. 0.0012;
  Matches   58;  Conservative   15;  Mismatches   77;  Indels   41;  Gaps    6;

Qy         86 RAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVP-------- 137
              | |   | :|| ||||:|||||      || |     | ||         | |
Db       2606 RNEGDKFILRIANVTRADAGKYELTAINPSGQANAELELTVVQSTKTVGAKPKFNESPIS 2665

Qy        138 --SCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRL---LENPRLGSQSTNSSYTM 192
                :||   : |  :           | |||   || :|  |   |:   : |  ||||
Db       2666 VQTCEKNRAELRASF--------SGTPAPACRWFYNGNELIDGLDGYTITSSDTNSS--- 2714

Qy        193 NTKTGTLQFNTVSKLDTGEYSCEARNSVGYR----------RCPGKRMQVDDLNISGIIA 242
                  |  |:| |   ||| |  ||  |              |  |  ::| : :
Db       2715 ------LLINSVDKKHFGEYLCTIRNQNGEELANAMILSEGEC-RKHPRIDIVFVCNSFI 2767

Qy        243 AVVVVALVISV 253
               ||  |:||:
Db       2768 FSVVHVLLISI 2778


Search completed: December  6, 2005, 13:32:04
Job time : 41 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:20:52 ; Search time 230 Seconds
(without alignments)
957.064 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_05.80:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1475	91.9	298	1	JAM2_HUMAN	P57087 homo sapien
2	1172	73.0	298	1	JAM2_MOUSE	Q9ji59 mus musculu
3	598.5	37.3	243	2	Q5ZJD1_CHICK	Q5zjd1 gallus gall
4	517.5	32.2	181	2	Q9CWD9_MOUSE	Q9cwd9 m mus muscu
5	479	29.8	310	1	JAM3_MOUSE	Q9d8b7 mus musculu
6	477	29.7	310	1	JAM3_RAT	Q68fq2 rattus norv
7	461.5	28.8	310	1	JAM3_HUMAN	Q9bx67 homo sapien
8	445	27.7	291	2	Q66JI5_XENTR	Q66ji5 xenopus tro
9	439.5	27.4	296	2	Q640C0_XENLA	Q640c0 xenopus lae
10	439.5	27.4	300	2	Q7SYQ7_XENLA	Q7syq7 xenopus lae
11	419.5	26.1	289	2	Q7ZWT0_XENLA	Q7zwt0 xenopus lae
12	414	25.8	257	2	Q4S0M3_TETNG	Q4s0m3 tetraodon n
13	404	25.2	299	1	JAM1_HUMAN	Q9y624 homo sapien
14	404	25.2	299	2	Q6FIB4_HUMAN	Q6fib4 homo sapien
15	402.5	25.1	298	1	JAM1_BOVIN	Q9xt56 bos taurus
16	402.5	25.1	298	2	Q5E9V8_BOVIN	Q5e9v8 bos taurus
17	401.5	25.0	292	2	Q66I72_BRARE	Q66i72 brachydanio
18	396.5	24.7	260	2	Q4S8Z8_TETNG	Q4s8z8 tetraodon n
19	394	24.5	300	1	JAM1_MOUSE	O88792 mus musculu
20	394	24.5	300	2	Q8VC39_MOUSE	Q8vc39 mus musculu
21	382	23.8	300	1	JAM1_RAT	Q9jhy1 rattus norv
22	379.5	23.6	273	2	Q4RRS6_TETNG	Q4rrs6 tetraodon n
23	366.5	22.8	259	2	Q9Y5B2_HUMAN	Q9y5b2 homo sapien
24	284.5	17.7	173	2	Q9JKD5_RAT	Q9jkd5 rattus norv
25	238	14.8	319	1	GPA33_HUMAN	Q99795 homo sapien
26	238	14.8	319	2	Q5VZP6_HUMAN	Q5vzp6 homo sapien
27	229	14.3	335	2	Q9PWR4_CHICK	Q9pwr4 gallus gall
28	228	14.2	318	2	Q91664_XENLA	Q91664 xenopus lae
29	228	14.2	335	2	Q9YGH1_CHICK	Q9ygh1 gallus gall
30	226	14.1	319	1	GPA33_MOUSE	Q9jka5 mus musculu
31	225.5	14.0	347	2	Q5XGG4_XENTR	Q5xgg4 xenopus tro
32	225.5	14.0	394	1	ESAM_RAT	Q6ayd4 rattus norv
33	217	13.5	181	2	Q91665_XENLA	Q91665 xenopus lae
34	214	13.3	335	2	Q9YGV5_CHICK	Q9ygv5 gallus gall
35	211.5	13.2	387	2	Q86XK7_HUMAN	Q86xk7 homo sapien
36	211.5	13.2	412	2	Q6MZS4_HUMAN	Q6mzs4 homo sapien
37	210	13.1	390	1	ESAM_HUMAN	Q96ap7 homo sapien
38	210	13.1	428	2	Q5U2P2_RAT	Q5u2p2 rattus norv
39	208.5	13.0	319	2	Q9TU80_CANFA	Q9tu80 canis famil
40	207.5	12.9	394	1	ESAM_MOUSE	Q925f2 mus musculu
41	207	12.9	442	2	Q6NW88_BRARE	Q6nw88 brachydanio
42	206.5	12.9	365	1	CXAR_BOVIN	Q8wmv3 bos taurus
43	203.5	12.7	344	2	Q568F7_BRARE	Q568f7 brachydanio
44	201.5	12.6	332	2	Q6P359_XENTR	Q6p359 xenopus tro
45	198.5	12.4	365	1	CXAR_HUMAN	P78310 homo sapien

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087; Q6UXG6; Q6YNC1;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 13-SEP-2005 (Rel. 48, Last annotation update)
DE Junctional adhesion molecule B precursor (JAMA-A) (Junctional adhesion
DE molecule 2) (Vascular endothelial junction-associated molecule) (VE-
DE JAM).
GN Name=JAM2; Synonyms=C21orf43, VEJAM; ORFNames=UNQ219/PRO245;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE, PROTEIN SEQUENCE OF 29-33, AND TISSUE
RP SPECIFICITY.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521; DOI=10.1074/jbc.M003189200;
RA Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP NUCLEOTIDE SEQUENCE.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976; DOI=10.1074/jbc.M002718200;
RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjercke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
RN [3]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=22032985; PubMed=12036298; DOI=10.1006/geno.2002.6782;
RA Gardiner K., Slavov D., Bechtel L., Davisson M.;
RT "Annotation of human chromosome 21 for relevance to Down syndrome:
RT gene structure and expression analysis.";
RL Genomics 79:833-843(2002).
RN [4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
RA Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
RA Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
RA Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
RA Lewis L., Liao D., Mark M.R., Robbie E., Sanchez C., Schoenfeld J.,
RA Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
RA Vandlen R.L., Watanabe C., Wieand D., Woods K., Xie M.-H.,
RA Yansura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
RA Wood W.I., Godowski P.J., Gray A.M.;

```
RT   "The secreted protein discovery initiative (SPDI), a large-scale
RT   effort to identify novel human secreted and transmembrane proteins: a
RT   bioinformatics assessment.";
RL   Genome Res. 13:2265-2270(2003).
RN   [5]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   TISSUE=Lung;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [6]
RP   PROTEIN SEQUENCE OF 29-43.
RX   PubMed=15340161; DOI=10.1110/ps.04682504;
RA   Zhang Z., Henzel W.J.;
RT   "Signal peptide prediction based on analysis of experimentally
RT   verified cleavage sites.";
RL   Protein Sci. 13:2819-2824(2004).
RN   [7]
RP   INTERACTION WITH JAM3.
RX   PubMed=11590146; DOI=10.1074/jbc.M105972200;
RA   Arrate M.P., Rodriguez J.M., Tran T.M., Brock T.A., Cunningham S.A.;
RT   "Cloning of human junctional adhesion molecule 3 (JAM3) and its
RT   identification as the JAM2 counter-receptor.";
RL   J. Biol. Chem. 276:45826-45832(2001).
RN   [8]
RP   REVIEW, AND NOMENCLATURE.
RX   PubMed=12810109; DOI=10.1016/S1471-4906(03)00117-0;
RA   Muller W.A.;
RT   "Leukocyte-endothelial-cell interactions in leukocyte transmigration
RT   and the inflammatory response.";
RL   Trends Immunol. 24:327-334(2003).
CC   -!- FUNCTION: May play a role in the processes of lymphocyte homing to
CC       secondary lymphoid organs.
CC   -!- SUBUNIT: Interacts with JAM3.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC       Localized at tight junctions of both epithelial and endothelial
CC       cells (By similarity).
CC   -!- TISSUE SPECIFICITY: Highest expression in the heart, placenta,
CC       lung, foreskin and lymph node. Prominently expressed on high
CC       endothelial venules, also present on the endothelia of other
CC       vessels. Localized to the intercellular boundaries of high
CC       endothelial cells.
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 1 Ig-like C2-type (immunoglobulin-like)
CC       domain.
CC   -!- SIMILARITY: Contains 1 Ig-like V-type (immunoglobulin-like)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ----------------------------------------------------------------------
DR   EMBL; AF255910; AAF81223.1; -; mRNA.
DR   EMBL; AY016009; AAG49022.1; -; mRNA.
DR   EMBL; AY077698; AAL82538.1; -; mRNA.
DR   EMBL; AY358361; AAQ88727.1; -; mRNA.
DR   EMBL; BC017779; AAH17779.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   Ensembl; ENSG00000154721; Homo sapiens.
DR   HGNC; HGNC:14686; JAM2.
DR   H-InvDB; HIX0016038; -.
DR   MIM; 606870; -.
DR   GO; GO:0005887; C:integral to plasma membrane; NAS.
DR   GO; GO:0016337; P:cell-cell adhesion; NAS.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00408; IGc2; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Direct protein sequencing; Glycoprotein; Immunoglobulin domain;
KW   Signal; Tight junction; Transmembrane.
FT   SIGNAL        1     28
FT   CHAIN        29    298       Junctional adhesion molecule B.
FT   TOPO_DOM     29    238       Extracellular (Potential).
FT   TRANSMEM    239    259       Potential.
FT   TOPO_DOM    260    298       Cytoplasmic (Potential).
FT   DOMAIN       32    127       Ig-like V-type.
FT   DOMAIN      134    238       Ig-like C2-type.
FT   CARBOHYD     98     98       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    187    187       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    236    236       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     50    109       Potential.
FT   DISULFID    155    214       Potential.
FT   CONFLICT    270    270       E -> G (in Ref. 3).
FT   CONFLICT    289    298       DFKHTKSFII -> VQWLTPVIPALWKAAAGGSRGQEF
FT                                (in Ref. 4).
SQ   SEQUENCE   298 AA;  33207 MW;  CA78E518E22DCAEE CRC64;

  Query Match             91.9%;  Score 1475;  DB 1;  Length 298;
  Best Local Similarity   100.0%;  Pred. No. 4.5e-111;
  Matches  288;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSEN 288
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSEN 288


RESULT 2
JAM2_MOUSE
ID   JAM2_MOUSE     STANDARD;      PRT;   298 AA.
AC   Q9JI59; Q8C5K9; Q8CE95;
DT   10-MAY-2005 (Rel. 47, Created)
DT   10-MAY-2005 (Rel. 47, Last sequence update)
DT   10-MAY-2005 (Rel. 47, Last annotation update)
DE   Junctional adhesion molecule B precursor (JAM-B) (Junctional adhesion
DE   molecule 2) (Vascular endothelial junction-associated molecule) (VE-
DE   JAM).
GN   Name=Jam2; Synonyms=Vejam;
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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OC   Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC   Muroidea; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   NUCLEOTIDE SEQUENCE, AND PROTEIN SEQUENCE OF 29-33.
RC   STRAIN=C57BL/6J;
RX   MEDLINE=20317114; PubMed=10779521; DOI=10.1074/jbc.M003189200;
RA   Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.;
RT   "Vascular endothelial junction-associated molecule, a novel member of
RT   the immunoglobulin superfamily, is localized to intercellular
RT   boundaries of endothelial cells.";
RL   J. Biol. Chem. 275:19139-19145(2000).
RN   [2]
RP   NUCLEOTIDE SEQUENCE, AND SUBCELLULAR LOCATION.
RX   MEDLINE=20489356; PubMed=11036763;
RA   Aurrand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;
RT   "Cloning of JAM-2 and JAM-3: an emerging junctional adhesion molecular
RT   family?";
RL   Curr. Top. Microbiol. Immunol. 251:91-98(2000).
RN   [3]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   STRAIN=C57BL/6J; TISSUE=Head, Medulla oblongata, and Skin;
RX   MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA   Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA   Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA   Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA   Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA   Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA   Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA   Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA   Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA   Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA   Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA   Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA   Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA   Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA   Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA   Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA   Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
RA   Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA   Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
RA   Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA   Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA   Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA   Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA   Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA   Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA   Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA   Birney E., Hayashizaki Y.;
RT   "Analysis of the mouse transcriptome based on functional annotation of
RT   60,770 full-length cDNAs.";
RL   Nature 420:563-573(2002).
RN   [4]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   STRAIN=C57BL/6J; TISSUE=Mammary gland;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [5]
RP   REVIEW, AND NOMENCLATURE.
RX   PubMed=12810109; DOI=10.1016/S1471-4906(03)00117-0;
RA   Muller W.A.;
RT   "Leukocyte-endothelial-cell interactions in leukocyte transmigration
RT   and the inflammatory response.";
RL   Trends Immunol. 24:327-334(2003).
CC   -!- FUNCTION: May play a role in the processes of lymphocyte homing to
CC       secondary lymphoid organs (By similarity).
CC   -!- SUBUNIT: Interacts with JAM3 (By similarity).
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC       Localized at tight junctions of both epithelial and endothelial
CC       cells.
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 1 Ig-like C2-type (immunoglobulin-like)
CC       domain.
CC   -!- SIMILARITY: Contains 1 Ig-like V-type (immunoglobulin-like)
CC       domain.
CC   ---------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ---------------------------------------------------------------------
DR   EMBL; AF255911; AAF81224.1; -; mRNA.
DR   EMBL; AJ291757; CAC20699.1; -; mRNA.
DR   EMBL; AK010616; BAB27064.1; -; mRNA.
DR   EMBL; AK013914; BAB29053.1; -; mRNA.
DR   EMBL; AK028757; BAC26102.1; -; mRNA.
DR   EMBL; AK078128; BAC37139.1; -; mRNA.
DR   EMBL; BC028778; AAH28778.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   Ensembl; ENSMUSG00000053062; Mus musculus.
DR   MGI; MGI:1933820; Jam2.
DR   GO; GO:0005615; C:extracellular space; TAS.
DR   GO; GO:0016021; C:integral to membrane; TAS.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Direct protein sequencing; Glycoprotein; Immunoglobulin domain;
KW   Signal; Tight junction; Transmembrane.
FT   SIGNAL        1    28
FT   CHAIN        29   298       Junctional adhesion molecule B.
FT   TOPO_DOM     29   236       Extracellular (Potential).
FT   TRANSMEM    237   257       Potential.
FT   TOPO_DOM    258   298       Cytoplasmic (Potential).
FT   DOMAIN       32   128       Ig-like V-type.
FT   DOMAIN      135   238       Ig-like C2-type.
FT   CARBOHYD     99    99       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     51   110       Potential.
FT   DISULFID    156   214       Potential.
FT   CONFLICT    133   133       V -> M (in Ref. 3; BAC26102).
FT   CONFLICT    174   174       T -> H (in Ref. 3; BAC37139).
FT   CONFLICT    183   183       G -> R (in Ref. 3; BAC37139).
SQ   SEQUENCE   298 AA;  33047 MW;  1124E0F07E6CF751 CRC64;

  Query Match             73.0%;  Score 1172;  DB 1;  Length 298;
  Best Local Similarity   78.5%;  Pred. No. 1.5e-86;
  Matches  227;  Conservative   25;  Mismatches   35;  Indels    2;  Gaps    2;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKD-QQVVTAVEYQEAILACKTPKKTVSS 59
              |||  :  |:|||| ||:||| |||| |||| || :| || :|:|||||||||||| ||
Db          1 MARSPQGLLMLLLLHYLIVALDYHKANGFSASKDHRQEVTVIEFQEAILACKTPKKTTSS 60
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Qy          60 RLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQ 119
               ||||||:|: || ||||| ||||||:||||||||||||||||||:||||||||:||||
Db          61 RLEWKKVGQGVSLVYYQQALQGDFKDRAEMIDFNIRIKNVTRSDAGEYRCEVSAPTEQGQ 120

Qy         120 NLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLLENP 179
               ||:|| | |||||||||||:||||:| ::|:|||||||||||||||||| |||||  || ||
Db         121 NLQEDKVMLEVLVAPAVPACEVPTSVMTGSVVELRCQDKEGNPAPEYIWFKDGTSLLGNP 180

Qy         180 RLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISG 239
               : |    |||||||||:| |||| :||:|:||| ||||||||:|||||||||| |||||
Db         181 K-GGTHNNSSYTMNTKSGILQFNMISKMDSGEYYCEARNSVGHRRCPGKRMQVDVLNISG 239

Qy         240 IIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSEN 288
               ||| ||||| |||||||| |||||||||||||||||| : :|| ||||||
Db         240 IIATVVVVAFVISVCGLGTCYAQRKGYFSKETSFQKGSPASKVTTMSEN 288


RESULT 3
Q5ZJD1_CHICK
ID   Q5ZJD1_CHICK PRELIMINARY;      PRT;   243 AA.
AC   Q5ZJD1;
DT   25-OCT-2004 (TrEMBLrel. 28, Created)
DT   25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT   25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE   Hypothetical protein.
GN   ORFNames=RCJMB04_19d4;
OS   Gallus gallus (Chicken).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC   Gallus.
OX   NCBI_TaxID=9031;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=CB; TISSUE=Bursa;
RA   Caldwell R.B., Kierzek A.M., Arakawa H., Bezzubov Y., Zaim J.,
RA   Fiedler P., Kutter S., Blagodatski A., Kostovska D., Koter M.,
RA   Plachy J., Carninci P., Hayashizaki Y., Buerstedde J.M.;
RT   "Full-length cDNAs from chicken bursal lymphocytes to facilitate
RT   genefunction analysis.";
RL   Genome Biol. 6:R6-R6(2005).
DR   EMBL; AJ720503; CAG32162.1; -; mRNA.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00408; IGc2; 1.
DR   PROSITE; PS50835; IG_LIKE; 1.
KW   Hypothetical protein; Immunoglobulin domain; Transmembrane.
SQ   SEQUENCE   243 AA;  26738 MW;  C1AE1CCD111A4383 CRC64;

  Query Match             37.3%;  Score 598.5;  DB 2;  Length 243;
  Best Local Similarity   48.4%;  Pred. No. 3.3e-40;
  Matches  134;  Conservative   32;  Mismatches   55;  Indels   56;  Gaps    7;

Qy           8 RLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTP-KKTVSSRLEWKKL 66
               || |||| || |   |||  | :   | : | | |::||||:||    | :| |:||||:
Db           5 RLRLLLLGYLGV-FCYHKVTGIAIETDNKNVKAEEFKEAILSCKHKFSKGMSLRIEWKKI 63

Qy          67 -GRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDT 125
                : ||||||     |:|
Db          64 QSQEVSFVYY----NGEF---------------------------------------- 77

Qy         126 VTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQS 185
                  | |  | | ||:||::|||||| |:: ||:|  || |:|:|: |||    ||
Db          78 -----TVPPTTPICVVPNSAMTGTVVELSCKEAEGSPPSEYQWYKNGVALLEKTGTGSAR 132

Qy         186 T-NSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGY-RRCPGKRMQVDDLNISGIIAA 243
               | | :|||| |:||| ||||| ||||| | | | :|  ::|  |||||||||:||||||
Db         133 TANITYTMNKKSGTLIFNTVSKNDTGEYFCVASNGIGLPQKCSMKRMQVDDLNVSGIIAA 192

Qy         244 VVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSS 280
               ||:||||:::||||| |||:||||:||:| ||||| |
Db         193 VVIVALVMALCGLGVLYAQKKGYFTKESSSQKSNSQS 229


RESULT 4
Q9CWD9_MOUSE
ID   Q9CWD9_MOUSE PRELIMINARY;      PRT;   181 AA.
AC   Q9CWD9;
DT   01-JUN-2001 (TrEMBLrel. 17, Created)
DT   01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT   01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
DE   Mus musculus ES cells cDNA, RIKEN full-length enriched library,
DE   clone:2410167M24 product:junction cell adhesion molecule 2, full
DE   insert sequence (Mus musculus 9.5 days embryo parthenogenote cDNA,
DE   RIKEN full-length enriched library, clone:B130032E13 product:junction
DE   cell adhesion molecule 2, full insert sequence).
GN   Name=Jam2;
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC   Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RX   MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
RA   Carninci P., Hayashizaki Y.;
RT   "High-efficiency full-length cDNA cloning.";
RL   Meth. Enzymol. 303:19-44(1999).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RX   MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
RA   Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA   Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA   Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA   Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA   Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA   Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA   Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA   Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA   Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA   Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA   Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA   Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA   Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA   Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA   Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA   Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA   Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA   Hayashizaki Y.;
RT   "Functional annotation of a full-length mouse cDNA collection.";
RL   Nature 409:685-690(2001).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RX   MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA   Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA   Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA   Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA   Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA   Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA   Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA   Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA   Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA   Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA   Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA   Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA   Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA   Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA   Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA   Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA   Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
RA   Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA   Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
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RA   Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA   Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA   Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA   Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA   Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA   Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA   Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA   Birney E., Hayashizaki Y.;
RT   "Analysis of the mouse transcriptome based on functional annotation of
RT   60,770 full-length cDNAs.";
RL   Nature 420:563-573(2002).
RN   [4]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RX   MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
RA   Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
RA   Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
RT   "Normalization and subtraction of cap-trapper-selected cDNAs to
RT   prepare full-length cDNA libraries for rapid discovery of new genes.";
RL   Genome Res. 10:1617-1630(2000).
RN   [5]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RX   MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600;
RA   Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,
RA   Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,
RA   Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
RA   Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
RA   Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M.,
RA   Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,
RA   Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;
RT   "RIKEN integrated sequence analysis (RISA) system-384-format
RT   sequencing pipeline with 384 multicapillary sequencer.";
RL   Genome Res. 10:1757-1771(2000).
RN   [6]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J;
RA   Adachi J., Aizawa K., Akahira S., Akimura T., Arai A., Aono H.,
RA   Arakawa T., Bono H., Carninci P., Fukuda S., Fukunishi Y., Furuno M.,
RA   Hanagaki T., Hara A., Hayatsu N., Hiramoto K., Hiraoka T., Hori F.,
RA   Imotani K., Ishii Y., Itoh M., Izawa M., Kasukawa T., Kato H.,
RA   Kawai J., Kojima Y., Konno H., Kouda M., Koya S., Kurihara C.,
RA   Matsuyama T., Miyazaki A., Nishi K., Nomura K., Numazaki R., Ohno M.,
RA   Okazaki Y., Okido T., Owa C., Saito H., Saito R., Sakai C., Sakai K.,
RA   Sano H., Sasaki D., Shibata K., Shibata Y., Shinagawa A., Shiraki T.,
RA   Sogabe Y., Suzuki H., Tagami M., Tagawa A., Takahashi F., Tanaka T.,
RA   Tejima Y., Toya T., Yamamura T., Yasunishi A., Yoshida K., Yoshino M.,
RA   Muramatsu M., Hayashizaki Y.;
RL   Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
RN   [7]
RP   NUCLEOTIDE SEQUENCE.
RC   STRAIN=C57BL/6J; TISSUE=Parthenogenote;
RA   Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
RA   Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W.,
RA   Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
RA   Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
RA   Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
RA   Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
RA   Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,
RA   Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
RA   Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,
RA   Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
RA   Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
RL   Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AK010826; BAB27208.1; -; mRNA.
DR   EMBL; AK045095; BAC32219.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   Ensembl; ENSMUSG00000053062; Mus musculus.
DR   MGI; MGI:1933820; Jam2.
DR   GO; GO:0005615; C:extracellular space; TAS.
DR   GO; GO:0016021; C:integral to membrane; TAS.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   SMART; SM00409; IG; 1.
DR   PROSITE; PS50835; IG_LIKE; 1.
KW   Immunoglobulin domain.
SQ   SEQUENCE   181 AA;  20330 MW;  603B6114FBB11AEB CRC64;

  Query Match             32.2%;  Score 517.5;  DB 2;  Length 181;
  Best Local Similarity   78.0%;  Pred. No. 8.4e-34;
  Matches  103;  Conservative   12;  Mismatches   16;  Indels    1;  Gaps    1;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKD-QQVVTAVEYQEAILACKTPKKTVSS 59
              |||  :  |:|||| ||:||| |||| |||| || :| || :|:||||||||||||| ||
Db          1 MARSPQGLLMLLLLHYLIVALDYHKANGFSASKDHRQEVTVIEFQEAILACKTPKKTTSS 60

Qy         60 RLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQ 119
              ||||||:|: || ||||| ||||||:||||||||||||||||||:||||||||:||||
Db         61 RLEWKKVGQGVSLVYYQQALQGDFKDRAEMIDFNIRIKNVTRSDAGEYRCEVSAPTEQGQ 120

Qy        120 NLEEDTVTLEVL 131
              ||:|| | ||||
Db        121 NLQEDKVMLEVL 132


RESULT 5
JAM3_MOUSE
ID   JAM3_MOUSE     STANDARD;      PRT;   310 AA.
AC   Q9D8B7; Q8BT59; Q9D1M9; Q9EPK4;
DT   10-MAY-2005 (Rel. 47, Created)
DT   10-MAY-2005 (Rel. 47, Last sequence update)
DT   10-MAY-2005 (Rel. 47, Last annotation update)
DE   Junctional adhesion molecule C precursor (JAM-C) (Junctional adhesion
DE   molecule 3) (JAM-3) (JAM-2).
GN   Name=Jam3;
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC   Muroidea; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   NUCLEOTIDE SEQUENCE [MRNA].
RX   MEDLINE=20489356; PubMed=11036763;
RA   Aurrand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;
RT   "Cloning of JAM-2 and JAM-3: an emerging junctional adhesion molecular
RT   family?";
RL   Curr. Top. Microbiol. Immunol. 251:91-98(2000).
RN   [2]
RP   NUCLEOTIDE SEQUENCE [MRNA].
RX   MEDLINE=21264728; PubMed=11053409; DOI=10.1074/jbc.M005458200;
RA   Aurrand-Lions M.A., Duncan L., Ballestrem C., Imhof B.A.;
RT   "JAM-2, a novel immunoglobulin superfamily molecule, expressed by
RT   endothelial and lymphatic cells.";
RL   J. Biol. Chem. 276:2733-2741(2001).
RN   [3]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   STRAIN=C57BL/6J; TISSUE=Embryo, Small intestine, and Wolffian duct;
RX   MEDLINE=22354683; PubMed=12466851; DOI=10.1038/nature01266;
RA   Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA   Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA   Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA   Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA   Schriml L.M., Kanapin A., Matsuda H., Batalov S., Beisel K.W.,
RA   Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.E., Cousins S.,
RA   Dalla E., Dragani T.A., Fletcher C.F., Forrest A., Frazer K.S.,
RA   Gaasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA   Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA   Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA   Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA   Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA   Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA   Petrovsky N., Pillai R., Pontius J.U., Qi D., Ramachandran S.,
RA   Ravasi T., Reed J.C., Reed D.J., Reid J., Ring B.Z., Ringwald M.,
RA   Sandelin A., Schneider C., Semple C.A., Setou M., Shimada K.,
RA   Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA   Verardo R., Wagner L., Wahlestedt C., Wang Y., Watanabe Y., Wells C.,
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RA   Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I., Yang L.,
RA   Yuan Z., Zavolan M., Zhu Y., Zimmer A., Carninci P., Hayatsu N.,
RA   Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA   Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA   Hara A., Hashizume W., Imotani K., Ishii Y., Itoh M., Kagawa I.,
RA   Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA   Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA   Birney E., Hayashizaki Y.;
RT   "Analysis of the mouse transcriptome based on functional annotation of
RT   60,770 full-length cDNAs.";
RL   Nature 420:563-573(2002).
RN   [4]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   STRAIN=FVB/N; TISSUE=Kidney;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [5]
RP   FUNCTION, AND TISSUE SPECIFICITY.
RX   PubMed=11739175; DOI=10.1182/blood.V98.13.3699;
RA   Aurrand-Lions M.A., Johnson-Leger C., Wong C., Du Pasquier L.,
RA   Imhof B.A.;
RT   "Heterogeneity of endothelial junctions is reflected by differential
RT   expression and specific subcellular localization of the three JAM
RT   family members.";
RL   Blood 98:3699-3707(2001).
RN   [6]
RP   REVIEW, AND NOMENCLATURE.
RX   PubMed=12810109; DOI=10.1016/S1471-4906(03)00117-0;
RA   Muller W.A.;
RT   "Leukocyte-endothelial-cell interactions in leukocyte transmigration
RT   and the inflammatory response.";
RL   Trends Immunol. 24:327-334(2003).
CC   -!- FUNCTION: May participate in cell-cell adhesion distinct from
CC       tight junctions.
CC   -!- SUBUNIT: Interacts with JAM2 (By similarity).
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC   -!- TISSUE SPECIFICITY: Endothelial cells.
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 1 Ig-like C2-type (immunoglobulin-like)
CC       domain.
CC   -!- SIMILARITY: Contains 1 Ig-like V-type (immunoglobulin-like)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ----------------------------------------------------------------------
DR   EMBL; AJ300304; CAC20704.1; -; mRNA.
DR   EMBL; AK008187; BAB25519.1; -; mRNA.
DR   EMBL; AK003326; BAB22715.1; -; mRNA.
DR   EMBL; AK013156; BAB28683.1; -; mRNA.
DR   EMBL; AK017692; BAC25526.1; -; mRNA.
DR   EMBL; AK032833; BAC28049.1; -; mRNA.
DR   EMBL; BC024357; AAH24357.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   Ensembl; ENSMUSG00000031990; Mus musculus.
DR   MGI; MGI:1933825; Jam3.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF00047; ig; 2.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Glycoprotein; Immunoglobulin domain; Signal; Transmembrane.
FT   SIGNAL        1     29       Potential.
FT   CHAIN        30    310       Junctional adhesion molecule C.
FT   TOPO_DOM     30    241       Extracellular (Potential).
FT   TRANSMEM    242    262       Potential.
FT   TOPO_DOM    263    310       Cytoplasmic (Potential).
FT   DOMAIN       35    127       Ig-like V-type.
FT   DOMAIN      139    236       Ig-like C2-type.
FT   CARBOHYD    104    104       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    192    192       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     53    115       Potential.
FT   DISULFID    160    219       Potential.
FT   CONFLICT     44     44       H -> Q (in Ref. 3; BAB25519).
FT   CONFLICT    172    172       S -> N (in Ref. 3; BAB25519).
FT   CONFLICT    303    303       R -> K (in Ref. 3; BAB22715).
FT   CONFLICT    306    307       SS -> IA (in Ref. 3; BAB22715).
SQ   SEQUENCE   310 AA;  34838 MW;  4B92BCB51D0A4B0A CRC64;

  Query Match             29.8%;  Score 479;  DB 1;  Length 310;
  Best Local Similarity   36.3%;  Pred. No. 2.1e-30;
  Matches  110;  Conservative   62;  Mismatches  109;  Indels   22;  Gaps    8;

Qy          1 MARRSRHRL--------LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILAC-K 51
              ::|| | ||         |||| |  ::     :|    :     ||   |::   |:|
Db          3 LSRRLRLRLYARLPDFFLLLLFRGCMI-----EAVNLKSSNRNPVVH--EFESVELSCII 55

Qy         52 TPKKTVSSRLEWKKL-GRSVSFVYYQQTLQGDFKNRAEMI-DFNIRIKNVTRSDAGKYRC 109
              |  :|   |:||||:     ::||:   :|||   | ::    ::|| ||||||:  |||
Db         56 TDSQTSDPRIEWKKIQDGQTTYVYFDNKIQGDLAGRTDVFGKTSLRIWNVTRSDSAIYRC 115

Qy        110 EVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWF 169
              || | ::: : ::| |: | | | |   | | :|::   |    |:||: || | | |:|:
Db        116 EVVALNDR-KEVDEITIELIVQVKPVTPVCRIPAAVPVGKTATLQCQESEGYPRPHYSWY 174

Qy        170 KDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKR 229
              :: : |  : |   :  |||: :|::|||| || | | |:|:| | | |   | || |:
Db        175 RNDVPLPTDSRANPRFQNSSFHVNSETGTLVFNAVHKDDSGQYYCIASNDAGAARCEGQD 234

Qy        230 MQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENV 289
              |:| ||||:|||  |:|| :|::|  :|:| | |:| |    | ::   | |:    : |
Db        235 MEVYDLNIAGIIGGVLVVLIVLAVITMGICCAYRRGCF---ISSKQDGESYKSPGKHDGV 291

Qy        290 QWL 292
               ::
Db        292 NYI 294


RESULT 6
JAM3_RAT
ID   JAM3_RAT       STANDARD;      PRT;   310 AA.
AC   Q68FQ2;
DT   10-MAY-2005 (Rel. 47, Created)
DT   10-MAY-2005 (Rel. 47, Last sequence update)
DT   10-MAY-2005 (Rel. 47, Last annotation update)
DE   Junctional adhesion molecule C precursor (JAM-C) (Junctional adhesion
DE   molecule 3) (JAM-3).
GN   Name=Jam3;
OS   Rattus norvegicus (Rat).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
```

```
OC   Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
OC   Muroidea; Muridae; Murinae; Rattus.
OX   NCBI_TaxID=10116;
RN   [1]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   TISSUE=Testis;
RG   NIH - Mammalian Gene Collection (MGC) project;
RL   Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases.
CC   -!- FUNCTION: May participate in cell-cell adhesion distinct from
CC       tight junctions (By similarity).
CC   -!- SUBUNIT: Interacts with JAM2 (By similarity).
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 1 Ig-like C2-type (immunoglobulin-like)
CC       domain.
CC   -!- SIMILARITY: Contains 1 Ig-like V-type (immunoglobulin-like)
CC       domain.
CC   ---------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ---------------------------------------------------------------------
DR   EMBL; BC079429; AAH79429.1; -; mRNA.
DR   Ensembl; ENSRNOG00000009149; Rattus norvegicus.
DR   RGD; 1303248; Jam3.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   SMART; SM00406; IGv; 2.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Glycoprotein; Immunoglobulin domain; Signal; Transmembrane.
FT   SIGNAL        1     31       Potential.
FT   CHAIN        32    310       Junctional adhesion molecule C.
FT   TOPO_DOM     32    241       Extracellular (Potential).
FT   TRANSMEM    242    262       Potential.
FT   TOPO_DOM    263    310       Cytoplasmic (Potential).
FT   DOMAIN       35    127       Ig-like V-type.
FT   DOMAIN      139    236       Ig-like C2-type.
FT   CARBOHYD    104    104       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    192    192       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     53    115       By similarity.
FT   DISULFID    160    219       By similarity.
SQ   SEQUENCE   310 AA;  34783 MW;  BB0CAD5EE41D383B CRC64;

  Query Match           29.7%;  Score 477;  DB 1;  Length 310;
  Best Local Similarity  37.0%;  Pred. No. 3.1e-30;
  Matches  112;  Conservative   59;  Mismatches  110;  Indels   22;  Gaps    8;

Qy          1 MARRSRHRL--------LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILAC-K 51
              ::|| | ||         |||| |  |:     :|    :      ||   |::   |:|
Db          3 LSRRLRLRLCARLPDFFLLLLFRGCVI-----EAVNLKSSNRNPVVH--EFESVELSCII 55

Qy         52 TPKKTVSSRLEWKKL-GRSVSFVYYQQTLQGDFKNRAEMI-DFNIRIKNVTRSDAGKYRC 109
              |  :|   |:||||:     ::||:   :|||   | ::    ::|| ||||||:  |||
Db         56 TDSQTNDPRIEWKKIQDGQTTYVYFDNKIQGDLAGRTDVFGKTSLRIWNVTRSDSAIYRC 115

Qy        110 EVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWF 169
              || | ::: : ::| |: | | | |  | | || :   |    |:||: || | | |:|:
Db        116 EVVALNDR-KEVDELTIELIVQVKPVAPVCRVPKAVPVGKAATLQCQESEGYPRPYYSWY 174

Qy        170 KDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKR 229
              :: : |  : |    :  |||: :|::|||| |: | | |:|:| | | |   |  || |:
Db        175 RNDVPLPTDSRANPRFQNSSFHVNSETGTLVFSAVHKEDSGQYYCIASNDAGAARCEGQD 234

Qy        230 MQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENV 289
              |:| ||||:|||  |:|| :|::|  :|:| | |:| |    | ::   | |:    | |
Db        235 MEVYDLNIAGIIGGVLVVLIVLAVITMGICCAYRRGCF---ISSKQDGESYKSPGKHEGV 291

Qy        290 QWL 292
                ::
Db        292 NYI 294


RESULT 7
JAM3_HUMAN
ID   JAM3_HUMAN     STANDARD;      PRT;   310 AA.
AC   Q9BX67; Q8WWL8; Q96FL1;
DT   25-OCT-2004 (Rel. 45, Created)
DT   25-OCT-2004 (Rel. 45, Last sequence update)
DT   13-SEP-2005 (Rel. 48, Last annotation update)
DE   Junctional adhesion molecule C precursor (JAM-C) (Junctional adhesion
DE   molecule 3) (JAM-3) (JAM-2).
GN   Name=JAM3; ORFNames=UNQ859/PRO1868;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC   Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   NUCLEOTIDE SEQUENCE, INTERACTION WITH JAM2, AND TISSUE SPECIFICITY.
RC   TISSUE=Brain;
RX   PubMed=11590146; DOI=10.1074/jbc.M105972200;
RA   Arrate M.P., Rodriguez J.M., Tran T.M., Brock T.A., Cunningham S.A.;
RT   "Cloning of human junctional adhesion molecule 3 (JAM3) and its
RT   identification as the JAM2 counter-receptor.";
RL   J. Biol. Chem. 276:45826-45832(2001).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RX   PubMed=11739175; DOI=10.1182/blood.V98.13.3699;
RA   Aurrand-Lions M.A., Johnson-Leger C., Wong C., Du Pasquier L.,
RA   Imhof B.A.;
RT   "Heterogeneity of endothelial junctions is reflected by differential
RT   expression and specific subcellular localization of the three JAM
RT   family members.";
RL   Blood 98:3699-3707(2001).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RX   PubMed=12208882; DOI=10.1084/jem.20020267;
RA   Santoso S., Sachs U.J.H., Kroll H., Linder M., Ruf A., Preissner K.T.,
RA   Chavakis T.;
RT   "The junctional adhesion molecule 3 (JAM-3) on human platelets is a
RT   counterreceptor for the leukocyte integrin Mac-1.";
RL   J. Exp. Med. 196:679-691(2002).
RN   [4]
RP   NUCLEOTIDE SEQUENCE, AND TISSUE SPECIFICITY.
RX   MEDLINE=21945252; PubMed=11944976; DOI=10.1006/geno.2002.6742;
RA   Phillips H.M., Renforth G.L., Spalluto C., Hearn T., Curtis A.R.J.,
RA   Craven L., Havarani B., Clement-Jones M., English C., Stumper O.,
RA   Salmon T., Hutchinson S., Jackson M.S., Wilson D.I.;
RT   "Narrowing the critical region within 11q24-qter for hypoplastic left
RT   heart and identification of a candidate gene, JAM3, expressed during
RT   cardiogenesis.";
RL   Genomics 79:475-478(2002).
RN   [5]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX   PubMed=14702039; DOI=10.1038/ng1285;
RA   Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R.,
RA   Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H.,
RA   Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S.,
RA   Yamamoto J.-I., Saito K., Kawai Y., Isono Y., Nakamura Y.,
RA   Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M.,
RA   Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H.,
RA   Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E.,
RA   Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M.,
RA   Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K.,
RA   Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y.,
RA   Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T.,
RA   Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O.,
RA   Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M.,
RA   Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S.,
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RA   Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S.,
RA   Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O.,
RA   Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H.,
RA   Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B.,
RA   Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y.,
RA   Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T.,
RA   Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y.,
RA   Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S.,
RA   Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T.,
RA   Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M.,
RA   Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T.,
RA   Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K.,
RA   Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R.,
RA   Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.;
RT   "Complete sequencing and characterization of 21,243 full-length human
RT   cDNAs.";
RL   Nat. Genet. 36:40-45(2004).
RN   [6]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX   MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
RA   Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
RA   Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
RA   Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
RA   Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
RA   Lewis L., Liao D., Mark M.R., Robbie E., Sanchez C., Schoenfeld J.,
RA   Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
RA   Vandlen R.L., Watanabe C., Wieand D., Woods K., Xie M.-H.,
RA   Yansura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
RA   Wood W.I., Godowski P.J., Gray A.M.;
RT   "The secreted protein discovery initiative (SPDI), a large-scale
RT   effort to identify novel human secreted and transmembrane proteins: a
RT   bioinformatics assessment.";
RL   Genome Res. 13:2265-2270(2003).
RN   [7]
RP   NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC   TISSUE=Eye, and Uterus;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [8]
RP   PROTEIN SEQUENCE OF 32-46.
RX   PubMed=15340161; DOI=10.1110/ps.04682504;
RA   Zhang Z., Henzel W.J.;
RT   "Signal peptide prediction based on analysis of experimentally
RT   verified cleavage sites.";
RL   Protein Sci. 13:2819-2824(2004).
RN   [9]
RP   REVIEW, AND NOMENCLATURE.
RX   PubMed=12810109; DOI=10.1016/S1471-4906(03)00117-0;
RA   Muller W.A.;
RT   "Leukocyte-endothelial-cell interactions in leukocyte transmigration
RT   and the inflammatory response.";
RL   Trends Immunol. 24:327-334(2003).
CC   -!- FUNCTION: May participate in cell-cell adhesion distinct from
CC       tight junctions.
CC   -!- SUBUNIT: Interacts with JAM2.
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC   -!- TISSUE SPECIFICITY: Widely expressed. Highest expression in
CC       placenta, brain and kidney.
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 1 Ig-like C2-type (immunoglobulin-like)
CC       domain.
CC   -!- SIMILARITY: Contains 1 Ig-like V-type (immunoglobulin-like)
CC       domain.
CC   ----------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ----------------------------------------------------------------------
DR   EMBL; AF356518; AAK27221.1; -; mRNA.
DR   EMBL; AJ344431; CAC69845.1; -; mRNA.
DR   EMBL; AF448478; AAM20925.1; -; mRNA.
DR   EMBL; AJ416101; CAC94776.1; ALT_INIT; mRNA.
DR   EMBL; AK074769; BAC11195.1; -; mRNA.
DR   EMBL; AK075309; BAC11538.1; -; mRNA.
DR   EMBL; AY358335; AAQ88701.1; -; mRNA.
DR   EMBL; BC010690; AAH10690.1; -; mRNA.
DR   EMBL; BC012147; AAH12147.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   Ensembl; ENSG00000166086; Homo sapiens.
DR   HGNC; HGNC:15532; JAM3.
DR   MIM; 606871; -.
DR   InterPro; IPR007110; Ig-like.
DR   Pfam; PF00047; ig; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Direct protein sequencing; Glycoprotein; Immunoglobulin domain;
KW   Signal; Transmembrane.
FT   SIGNAL        1     31
FT   CHAIN        32    310       Junctional adhesion molecule C.
FT   TOPO_DOM     32    241       Extracellular (Potential).
FT   TRANSMEM    242    262       Potential.
FT   TOPO_DOM    263    310       Cytoplasmic (Potential).
FT   DOMAIN       35    127       Ig-like V-type.
FT   DOMAIN      139    236       Ig-like C2-type.
FT   CARBOHYD    104    104       N-linked (GlcNAc. . .) (Potential).
FT   CARBOHYD    192    192       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     53    115       Potential.
FT   DISULFID    160    219       Potential.
FT   CONFLICT    136    136       Q -> R (in Ref. 7; AAH10690).
SQ   SEQUENCE   310 AA;  35020 MW;  CE39ADF33EA1DAB9 CRC64;

  Query Match             28.8%;  Score 461.5;  DB 1;  Length 310;
  Best Local Similarity   37.1%;  Pred. No. 5.6e-29;
  Matches  104;  Conservative   52;  Mismatches  103;  Indels   21;  Gaps    7;

Qy          1 MARRSRHRL----------LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILAC 50
              || |   ||          |||| |  ::      |   :    ||   |::   |:|
Db          1 MALRRPPRLRLCARLPDFFLLLLFRGCLIG-----AVNLKSSNRTPVVQ--EFESVELSC 53

Qy         51 -KTPKKTVSSRLEWKKL-GRSVSFVYYQQTLQGDFKNRAEMI-DFNIRIKNVTRSDAGKY 107
               |  :|   |:||||:     ::|::   :|||   |||::   :::| |||| |:  |
Db         54 IITDSQTSDPRIEWKKIQDEQTTYVFFDNKIQGDLAGRAEILGKTSLKIWNVTRRDSALY 113

Qy        108 RCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYT 167
              |||| | ::: : ::|  : | | | |  | | || :   | :  | ||: ||:| | |:
Db        114 RCEVVARNDR-KEIDEIVIELTVQVKPVTPVCRVPKAVPVGKMATLHCQESEGHPRPHYS 172

Qy        168 WFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPG 227
              |::: : |  : |   :  ||: :|::|||| |  | | |:|:| | | |  | ||
Db        173 WYRNDVPLPTDSRANPRFRNSSFHLNSETGTLVFTAVHKDDSGQYYCIASNDAGSARCEE 232

Qy        228 KRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYF 267
              : |:| |||| |||  |:||  |:::  ||:| | |:|||
Db        233 QEMEVYDLNIGGIIGGVLVVLAVLALITLGICCAYRRGYF 272
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RESULT 8
Q66JI5_XENTR
ID   Q66JI5_XENTR PRELIMINARY;      PRT;   291 AA.
AC   Q66JI5;
DT   25-OCT-2004 (TrEMBLrel. 28, Created)
DT   25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT   25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE   MGC79514 protein.
GN   Name=MGC79514;
OS   Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus; Silurana.
OX   NCBI_TaxID=8364;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Embryo;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Embryo;
RA   Klein S., Gerhard D.S.;
RL   Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC080901; AAH80901.1; -; mRNA.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Immunoglobulin domain.
SQ   SEQUENCE   291 AA;  31538 MW;  D6A3115178E222A6 CRC64;

  Query Match             27.7%;  Score 445;  DB 2;  Length 291;
  Best Local Similarity   35.0%;  Pred. No. 1.1e-27;
  Matches  103;  Conservative   57;  Mismatches  120;  Indels   14;  Gaps    6;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAY-GFSAPKDQQVVTAVEYQEAILACKTPKKTVSS 59
              ||  | :|  ::|   |: |  :  |: | | |     :|  :   | | |        |
Db          1 MATASSNRGAVVL--GLLCACLWTAAFAGVSTP--NPTITVKQGATADLRCTYTSDFTKS 56

Qy         60 RLEWKKLGRSVS--FVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 117
              |:||| :   :   ||||  ||   : |||  :   | :  :|  |||:| |||::
Db         57 RVEWKFVNNQLETFFVYYDGTLTASYVNRATSVPQGIILNQITSKDAGEYSCEVTSVDSN 116

Qy        118 GQNL-EEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLL 176
              || |  |  : | |:|||: |   ||::  :|: ||||| : :| | | :||:::   :
Db        117 GQTLYGEAKIQLLVIVAPSQPMAHVPNTVRTGSAVELRCVETQGYPPPTFTWYQNKAPMP 176

Qy        177 ENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLN 236
              ||:      |::||::  || |:|  |:  |:|:| |:| || | :     || | |:|
Db        177 PNPQ------NATYTIDPNTGVLKFRAVAASDSGDYYCKAANSEGEQVSAIVRMNVQDVN 230

Qy        237 ISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQ 290
              : ||:||||:| |:::: | |: ||  :||  |: : :   |    |   :| |
Db        231 VGGIVAAVVIVLLILALIGFGLWYAYSRGYLDKKGNKKVIYSQPSETRSDKNFQ 284


RESULT 9
Q640C0_XENLA
ID   Q640C0_XENLA PRELIMINARY;      PRT;   296 AA.
AC   Q640C0;
DT   25-OCT-2004 (TrEMBLrel. 28, Created)
DT   25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
DT   25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
DE   LOC398627 protein (Fragment).
GN   Name=LOC398627;
OS   Xenopus laevis (African clawed frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus; Xenopus.
OX   NCBI_TaxID=8355;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Kidney;
RX   MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
RA   Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
RA   Richardson P.;
RT   "Genetic and genomic tools for Xenopus research: The NIH Xenopus
RT   initiative.";
RL   Dev. Dyn. 225:384-391(2002).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Kidney;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Kidney;
RA   Klein S., Gerhard D.S.;
RL   Submitted (SEP-2004) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC082710; AAH82710.1; -; mRNA.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   PROSITE; PS50835; IG_LIKE; 2.
FT   NON_TER       1       1
SQ   SEQUENCE   296 AA;  32269 MW;  2EF4953AB840A15C CRC64;

  Query Match             27.4%;  Score 439.5;  DB 2;  Length 296;
  Best Local Similarity   35.4%;  Pred. No. 3.2e-27;
  Matches   95;  Conservative   55;  Mismatches  101;  Indels   17;  Gaps    5;

Qy         28 GFSAPKDQQVVTAVEYQEAILACKTPKKTVSSRLEWKKLGR--SVSFVYYQQTLQGDFKN 85
```

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                 | :||     :|  |      | |      :: |:||| : :    |||:|  :|   :|:
Db         34 GVTAP--DPTITVKEGDSPDLRCSYTSDYINPRVEWKFVNKDQETSFVFYDGSLTASYKD 91

Qy         86 RAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ---GQNLEEDTVTLEVLVAPAVPSCEVP 142
               ||       |::  ||| |||:| |||::   :    |     |  : |:|:|||  |  :||
Db         92 RATSYPQGIKLNQVTRKDAGEYSCEVTSTGTKVLYG----EAKIQLQVIVAPGTPVAQVP 147

Qy        143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFN 202
               ||| :|:| || | : :| | | :||: :      |  : ::| ||:||::  || |:|
Db        148 SSARTGSVAELMCVETQGFPLPTFTWYHN------NSPMQAKSQNSTYTIDPNTGVLKFA 201

Qy        203 TVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQ 262
               :|   |:||| |:| || | :     || | |:|: ||:||||:| |:::: | |: :|
Db        202 SVGTSDSGEYYCKATNSQGEQSSAIVRMDVKDVNVGGIVAAVVIVLLILALLGFGLWFAY 261

Qy        263 RKGYFSKETSFQKSNSSSKATTMSENVQ 290
                :||  :: : :   |     |   :| |
Db        262 SRGYLDRKGNKKVIYSQPSETRSDKNFQ 289


RESULT 10
Q7SYQ7_XENLA
ID   Q7SYQ7_XENLA PRELIMINARY;      PRT;   300 AA.
AC   Q7SYQ7;
DT   01-OCT-2003 (TrEMBLrel. 25, Created)
DT   01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   LOC398627 protein (Fragment).
GN   Name=LOC398627;
OS   Xenopus laevis (African clawed frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus; Xenopus.
OX   NCBI_TaxID=8355;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Whole;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Whole;
RX   MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
RA   Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
RA   Richardson P.;
RT   "Genetic and genomic tools for Xenopus research: The NIH Xenopus
RT   initiative.";
RL   Dev. Dyn. 225:384-391(2002).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Whole;
RA   Klein S., Strausberg R.;
RL   Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC054305; AAH54305.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   SMART; SM00408; IGc2; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
FT   NON_TER       1       1
SQ   SEQUENCE   300 AA;  32858 MW;  02BC49DC74E271D4 CRC64;

  Query Match             27.4%;  Score 439.5;  DB 2;  Length 300;
  Best Local Similarity   35.4%;  Pred. No. 3.3e-27;
  Matches   95;  Conservative   55;  Mismatches  101;  Indels   17;  Gaps    5;

Qy         28 GFSAPKDQQVVTAVEYQEAILACKTPKKTVSSRLEWKKLGR--SVSFVYYQQTLQGDFKN 85
                | :||     :|  |      | |      :: |:||| : :    |||:|  :|   :|:
Db         38 GVTAP--DPTITVKEGDSPDLRCSYTSDYINPRVEWKFVNKDQETSFVFYDGSLTASYKD 95

Qy         86 RAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ---GQNLEEDTVTLEVLVAPAVPSCEVP 142
               ||       |::  ||| |||:| |||::   :    |     |  : |:|:|||  |  :||
Db         96 RATSYPQGIKLNQVTRKDAGEYSCEVTSTGTKVLYG----EAKIQLQVIVAPGTPVAQVP 151

Qy        143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFN 202
               ||| :|:| || | : :| | | :||: :      |  : ::| ||:||::  || |:|
Db        152 SSARTGSVAELMCVETQGFPLPTFTWYHN------NSPMQAKSQNSTYTIDPNTGVLKFA 205

Qy        203 TVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQ 262
               :|   |:||| |:| || | :     || | |:|: ||:||||:| |:::: | |: :|
Db        206 SVGTSDSGEYYCKATNSQGEQSSAIVRMDVKDVNVGGIVAAVVIVLLILALLGFGLWFAY 265

Qy        263 RKGYFSKETSFQKSNSSSKATTMSENVQ 290
                :||  :: : :   |     |   :| |
Db        266 SRGYLDRKGNKKVIYSQPSETRSDKNFQ 293


RESULT 11
Q7ZWT0_XENLA
ID   Q7ZWT0_XENLA PRELIMINARY;      PRT;   289 AA.
AC   Q7ZWT0;
DT   01-JUN-2003 (TrEMBLrel. 24, Created)
DT   01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
DT   01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
DE   MGC53721 protein.
OS   Xenopus laevis (African clawed frog).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
OC   Xenopodinae; Xenopus; Xenopus.
OX   NCBI_TaxID=8355;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Embryo;
RX   MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA   Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA   Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA   Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA   Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA   Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA   Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA   Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA   Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA   Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA   Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA   Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA   Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA   Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA   Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA   Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA   Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA   Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT   "Generation and initial analysis of more than 15,000 full-length human
RT   and mouse cDNA sequences.";
RL   Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Embryo;
```

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RX   MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
RA   Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
RA   Richardson P.;
RT   "Genetic and genomic tools for Xenopus research: The NIH Xenopus
RT   initiative.";
RL   Dev. Dyn. 225:384-391(2002).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Embryo;
RA   Klein S., Strausberg R.;
RL   Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; BC046720; AAH46720.1; -; mRNA.
DR   HSSP; O88792; 1F97.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00408; IGc2; 2.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Immunoglobulin domain; Transmembrane.
SQ   SEQUENCE   289 AA;  31630 MW;  24354B5A37618845 CRC64;

  Query Match             26.1%;  Score 419.5;  DB 2;  Length 289;
  Best Local Similarity   35.9%;  Pred. No. 1.3e-25;
  Matches   90;  Conservative   52;  Mismatches  100;  Indels    9;  Gaps    3;

Qy         42 EYQEAILACKTPKKTVSSRLEWKKLGR--SVSFVYYQQTLQGDFKNRAEMIDFNIRIKNV 99
              | : | | |       | |:||| : :    |||:|  :|   :|:||      | :| :
Db         39 EGESAELQCSYSSDFTSPRVEWKFVNKDQETSFVFYDGSLTAPYKDRAIPYPQGITLKQI 98

Qy        100 TRSDAGKYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKE 159
              || |||:| |||::   :    |  : |:|:|||: |  :|| |  :|:| || | : :
Db         99 TRKDAGEYSCEVTSTGSK-TLYGEAKIQLQVIVAPSKPVAQVPRSVSTGSVAELLCVEND 157

Qy        160 GNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNS 219
              | | | : |:::   :   |:      ||:||:: ||| |:|  ||  |:||| ||| |:
Db        158 GYPPPTFIWYRNKSPMQIAPQ------NSTYTIDPKTGVLKFAAVSTSDSGEYYCEATNN 211

Qy        220 VGYRRCPGKRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSS 279
              | :     || | |:|: ||:||||:| |:::: | |: :|  :||  :: : :   |
Db        212 QGKQASDLVRMDVQDVNVGGIVAAVVIVLLILALIGFGMWFAYSRGYLDRKENKKVIYSL 271

Qy        280 SKATTMSENVQ 290
                 :|   :| |
Db        272 PSETRSDKNFQ 282


RESULT 12
Q4S0M3_TETNG
ID   Q4S0M3_TETNG PRELIMINARY;      PRT;   257 AA.
AC   Q4S0M3;
DT   13-SEP-2005 (TrEMBLrel. 31, Created)
DT   13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
DT   13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
DE   Chromosome 2 SCAF14781, whole genome shotgun sequence.
GN   ORFNames=GSTENG00025959001;
OS   Tetraodon nigroviridis (Green puffer).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC   Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
OC   Tetradontoidea; Tetraodontidae; Tetraodon.
OX   NCBI_TaxID=99883;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RA   Jaillon O., Aury J.M., Brunet F., Petit J.L., Stange-Thomann N.,
RA   Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
RA   Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
RA   Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,
RA   Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
RA   Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
RA   Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA   Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,
RA   Kellis M., Volff JN., Guigo R., Zody M.C., Mesirov J.,
RA   Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
RA   Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
RA   Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.;
RT   "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
RT   the early vertebrate proto-karyotype.";
RL   Nature 431:946-957(2004).
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RG   Genoscope; Whitehead Institute Centre for Genome Research;
RL   Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
CC   -!- CAUTION: The sequence shown here is derived from an
CC       EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is
CC       preliminary data.
DR   EMBL; CAAE01014781; CAG05809.1; -; Genomic_DNA.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Immunoglobulin domain; Repeat.
SQ   SEQUENCE   257 AA;  28233 MW;  B8318A386D83E7BE CRC64;

  Query Match             25.8%;  Score 414;  DB 2;  Length 257;
  Best Local Similarity   36.8%;  Pred. No. 3.1e-25;
  Matches   98;  Conservative   51;  Mismatches  101;  Indels   16;  Gaps    6;

Qy          9 LLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACK-TPKKTVSSRLEWKKLG 67
              | ||||  |:          | |:    |   |: :|:| |:   ::  : |:||||
Db          4 LALLLLITLLCPACLSVTVSSSKPR----VEVHEHTDAVLPCEFRTERDQNPRVEWKKKE 59

Qy         68 RSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEEDTVT 127
              : | |||:   |  ::  ||::    : |  ||: |:|:|||||:| ||   || |  ||
Db         60 KGVVFVYFNGKLTKEYAKRAKIDGATLTIHAVTQKDSGEYRCEVTA-SEDSVNLGEAYVT 118

Qy        128 LEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTN 187
              | ||| | :|||:||||   |: :|| |:||   |   | |:||        | : : :
Db        119 LNVLVPPHIPSCDVPSSVFVGSGLELHCKDKLSVPPATYRWYKDN-------RALTATAD 171

Qy        188 SSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGY-RRCPGKRMQVDD--LNISGIIAAV 244
              : | :: | |||: |:||| |:| | ||: |||   : |  ::::| |  ||:: :|:
Db        172 TPYIIDMKKGTLKLNSVSKTDSGMYRCESSNSVGAPKSCVAQQLKVIDYPLNLTILISGA 231

Qy        245 VVVALVISVCGLGVCYAQRKGYFSKE 270
                |  : :| : ||  :|:|    |
Db        232 AGFAAFVLICCICVCVCRRRGCCKSE 257


RESULT 13
JAM1_HUMAN
ID   JAM1_HUMAN     STANDARD;      PRT;   299 AA.
AC   Q9Y624;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   13-SEP-2005 (Rel. 48, Last annotation update)
DE   Junctional adhesion molecule A precursor (JAM-A) (Junctional adhesion
DE   molecule 1) (JAM) (Platelet adhesion molecule 1) (PAM-1) (Platelet F11
DE   receptor).
GN   Name=F11R; Synonyms=JAM1, JCAM; ORFNames=UNQ264/PRO301;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC   Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   NUCLEOTIDE SEQUENCE [MRNA].
RX   MEDLINE=99323940; PubMed=10395639;
RA   Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA   Iwamatsu A., Kita T.;
RT   "Combined treatment of TNF-alpha and IFN-gamma causes redistribution
RT   of junctional adhesion molecule in human endothelial cells.";
```

RL J. Immunol. 163:553-557(1999).
RN [2]
RP NUCLEOTIDE SEQUENCE [MRNA].
RX PubMed=10753840;
RA Sobocka M.B., Sobocki T., Banerjee P., Weiss C., Rushbrook J.I.,
RA Norin A.J., Hartwig J., Salifu M.O., Markell M.S., Babinska A.,
RA Ehrlich Y.H., Kornecki E.;
RT "Cloning of the human platelet F11 receptor: a cell adhesion molecule
RT member of the immunoglobulin superfamily involved in platelet
RT aggregation.";
RL Blood 95:2600-2609(2000).
RN [3]
RP NUCLEOTIDE SEQUENCE [MRNA], AND SUBCELLULAR LOCATION.
RX PubMed=11171323;
RA Naik U.P., Naik M.U., Eckfeld K., Martin-DeLeon P., Spychala J.;
RT "Characterization and chromosomal localization of JAM-1, a platelet
RT receptor for a stimulatory monoclonal antibody.";
RL J. Cell Sci. 114:539-547(2001).
RN [4]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Brain;
RX MEDLINE=21154917; PubMed=11230166; DOI=10.1101/gr.154701;
RA Wiemann S., Weil B., Wellenreuther R., Gassenhuber J., Glassl S.,
RA Ansorge W., Boecher M., Bloecker H., Bauersachs S., Blum H.,
RA Lauber J., Duesterhoeft A., Beyer A., Koehrer K., Strack N.,
RA Mewes H.-W., Ottenwaelder B., Obermaier B., Tampe J., Heubner D.,
RA Wambutt R., Korn B., Klein M., Poustka A.;
RT "Towards a catalog of human genes and proteins: sequencing and
RT analysis of 500 novel complete protein coding human cDNAs.";
RL Genome Res. 11:422-435(2001).
RN [5]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RX MEDLINE=22887296; PubMed=12975309; DOI=10.1101/gr.1293003;
RA Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D.T., Brush J.,
RA Chen J., Chow B., Chui C., Crowley C., Currell B., Deuel B., Dowd P.,
RA Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens S.,
RA Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J.,
RA Lewis L., Liao D., Mark M.R., Robbie E., Sanchez C., Schoenfeld J.,
RA Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A.,
RA Vandlen R.L., Watanabe C., Wieand D., Woods K., Xie M.-H.,
RA Yansura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D.,
RA Wood W.I., Godowski P.J., Gray A.M.;
RT "The secreted protein discovery initiative (SPDI), a large-scale
RT effort to identify novel human secreted and transmembrane proteins: a
RT bioinformatics assessment.";
RL Genome Res. 13:2265-2270(2003).
RN [6]
RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
RC TISSUE=Ovary;
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [7]
RP PROTEIN SEQUENCE OF 28-103 AND 123-130, AND N-GLYCOSYLATION.
RX PubMed=7646439;
RA Naik U.P., Ehrlich Y.H., Kornecki E.;
RT "Mechanisms of platelet activation by a stimulatory antibody: cross-
RT linking of a novel platelet receptor for monoclonal antibody F11 with
RT the Fc gamma RII receptor.";
RL Biochem. J. 310:155-162(1995).
RN [8]
RP PROTEIN SEQUENCE OF 28-42.
RX PubMed=15340161; DOI=10.1110/ps.04682504;
RA Zhang Z., Henzel W.J.;
RT "Signal peptide prediction based on analysis of experimentally
RT verified cleavage sites.";
RL Protein Sci. 13:2819-2824(2004).
RN [9]
RP PROTEIN SEQUENCE OF 28-39.
RC TISSUE=Platelet;
RX MEDLINE=22608298; PubMed=12665801; DOI=10.1038/nbt810;
RA Gevaert K., Goethals M., Martens L., Van Damme J., Staes A.,
RA Thomas G.R., Vandekerckhove J.;
RT "Exploring proteomes and analyzing protein processing by mass
RT spectrometric identification of sorted N-terminal peptides.";
RL Nat. Biotechnol. 21:566-569(2003).
RN [10]
RP INTERACTION WITH MPDZ.
RX PubMed=11489913; DOI=10.1083/jcb.200103047;
RA Itoh M., Sasaki H., Furuse M., Ozaki H., Kita T., Tsukita S.;
RT "Junctional adhesion molecule (JAM) binds to PAR-3: a possible
RT mechanism for the recruitment of PAR-3 to tight junctions.";
RL J. Cell Biol. 154:491-497(2001).
RN [11]
RP REVIEW, AND NOMENCLATURE.
RX PubMed=12810109; DOI=10.1016/S1471-4906(03)00117-0;
RA Muller W.A.;
RT "Leukocyte-endothelial-cell interactions in leukocyte transmigration
RT and the inflammatory response.";
RL Trends Immunol. 24:327-334(2003).
CC -!- FUNCTION: Seems to plays a role in epithelial tight junction
CC formation. Appears early in primordial forms of cell junctions and
CC recruits PARD3. The association of the PARD6-PARD3 complex may
CC prevent the interaction of PARD3 with JAM1, thereby preventing
CC tight junction assembly (By similarity). Plays a role in
CC regulating monocyte transmigration involved in integrity of
CC epithelial barrier. Involved in platelet activation.
CC -!- SUBUNIT: Interacts with the first PDZ domain of PARD3. The
CC association between PARD3 and PARD6B probably disrupts this
CC interaction (By similarity). Interacts with the ninth PDZ domain
CC of MPDZ.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC Localized at tight junctions of both epithelial and endothelial
CC cells.
CC -!- PTM: N-Glycosylated.
CC -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC -!- SIMILARITY: Contains 2 Ig-like V-type (immunoglobulin-like)
CC domains.
CC --

CC --
DR EMBL; AF111713; AAD42050.1; -; mRNA.
DR EMBL; AF207907; AAF22829.1; -; mRNA.
DR EMBL; AF172398; AAD48877.1; -; mRNA.
DR EMBL; AL136649; CAB66584.1; -; mRNA.
DR EMBL; AY358896; AAQ89255.1; -; mRNA.
DR EMBL; BC001533; AAH01533.1; -; mRNA.
DR PIR; A59406; S56749.
DR PDB; 1NBQ; X-ray; A/B=27-233.
DR Ensembl; ENSG00000158769; Homo sapiens.
DR HGNC; HGNC:14685; F11R.
DR MIM; 605721; -.
DR GO; GO:0005911; C:intercellular junction; TAS.
DR GO; GO:0006954; P:inflammatory response; TAS.

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DR   InterPro; IPR007110; Ig-like.
DR   Pfam; PF00047; ig; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   3D-structure; Direct protein sequencing; Glycoprotein;
KW   Immunoglobulin domain; Repeat; Signal; Tight junction; Transmembrane.
FT   SIGNAL       1     27
FT   CHAIN       28    299       Junctional adhesion molecule A.
FT   TOPO_DOM    28    238       Extracellular (Potential).
FT   TRANSMEM   239    259       Potential.
FT   TOPO_DOM   260    299       Cytoplasmic (Potential).
FT   DOMAIN      28    125       Ig-like V-type 1.
FT   DOMAIN     135    228       Ig-like V-type 2.
FT   CARBOHYD   185    185       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID    50    109       Potential.
FT   DISULFID   153    212       Potential.
SQ   SEQUENCE   299 AA;  32583 MW;  D95DE2FEA23D2851 CRC64;

  Query Match             25.2%;  Score 404;  DB 1;  Length 299;
  Best Local Similarity   35.2%;  Pred. No. 2.4e-24;
  Matches  102;  Conservative   46;  Mismatches  126;  Indels   16;  Gaps    7;

Qy          2 ARRSRHRLLLLLLRYLV--VALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSS 59
              |:  |  | | :|  |:  :|||       :    :  |    |      |:|     : |
Db          5 AQVERKLLCLFILAILLCSLALG-----SVTVHSSEPEVRIPENNPVKLSCAYSGFS-SP 58

Qy         60 RLEWK-KLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
              |:|||   | :   | |   :   :::|   :   |  |:||| | | | | ||   | |
Db         59 RVEWKFDQGDTTRLVCYNNKITASYEDRVTFLPTGITFKSVTREDTGTYTCMVS--EEGG 116

Qy        119 QNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
              :  |  | | ||| |: |:  :|||| |    | | :::|:|  |||||||| :  |
Db        117 NSYGEVKVKLIVLVPPSKPTVNIPSSATIGNRAVLTCSEQDGSPPSEYTWFKDGIVMPTN 176

Qy        179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNI 237
              |:     :|||| :|  || | |: :|  ||||||||||  |        ||:  : |:
Db        177 PKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEYSCEARNGYGTPMTSNAVRMEAVERNV 236

Qy        238 SGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSE 287
                :|||:|  ::: :   |: :|  :|:| :     |  :|||    |:
Db        237 GVIVAAVLVTLILLGILVFGIWFAYSRGHFDR----TKKGTSSKKVIYSQ 282


RESULT 14
Q6FIB4_HUMAN
ID   Q6FIB4_HUMAN PRELIMINARY;      PRT;   299 AA.
AC   Q6FIB4;
DT   05-JUL-2004 (TrEMBLrel. 27, Created)
DT   05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
DT   13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
DE   F11R protein (F11 receptor protein) (JAM1) (Hypothetical protein
DE   FLJ90671).
GN   Name=F11R; ORFNames=RP11-544M22.2-001;
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC   Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RA   Ebert L., Schick M., Neubert P., Schatten R., Henze S., Korn B.;
RL   Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
RN   [2]
RP   NUCLEOTIDE SEQUENCE.
RX   MEDLINE=20537956; PubMed=11087121; DOI=10.1080/15216540050176593;
RA   Gupta S.K., Pillarisetti K., Ohlstein E.H.;
RT   "Platelet agonist F11 receptor is a member of the immunoglobulin
RT   superfamily and identical with junctional adhesion molecule (JAM):
RT   regulation of expression in human endothelial cells and macrophages.";
RL   IUBMB Life 50:51-56(2000).
RN   [3]
RP   NUCLEOTIDE SEQUENCE.
RX   MEDLINE=22701983; PubMed=12817473; DOI=10.1515/BC.2003.085;
RA   Wenzel K., Felix S.B., Flachmeier C., Heere P., Schulze W.,
RA   Grunewald I., Pankow H., Hewelt A., Scherneck S., Bauer D.,
RA   Hoehe M.R.;
RT   "Identification and characterization of KAT, a novel gene
RT   preferentially expressed in several human cancer cell lines.";
RL   Biol. Chem. 384:763-775(2003).
RN   [4]
RP   NUCLEOTIDE SEQUENCE.
RC   TISSUE=Placenta;
RA   Otsuki T., Ota T., Nishikawa T., Hayashi K., Suzuki Y., Yamamoto J.,
RA   Wakamatsu A., Kimura K., Sakamoto K., Hatano N., Kawai Y., Ishii S.,
RA   Saito K., Kojima S., Sugiyama T., Ono T., Okano K., Yoshikawa Y.,
RA   Aotsuka S., Sasaki N., Hattori A., Okumura K., Nagai K., Sugano S.,
RA   Isogai T.;
RT   "Signal Sequence and Keyword Trap in silico for Selection of Full-
RT   Length Human cDNAs Encoding Secretion or Membrane Proteins from Oligo-
RT   Capped cDNA Libraries.";
RL   DNA Res. 12:117-126(2005).
RN   [5]
RP   NUCLEOTIDE SEQUENCE.
RA   Kalnine N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S.,
RA   Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y.,
RA   Phelan M., Farmer A.;
RT   "Cloning of human full-length CDSs in BD Creator(TM) System Donor
RT   vector.";
RL   Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
RN   [6]
RP   NUCLEOTIDE SEQUENCE.
RA   Harrison E.;
RL   Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; CR533512; CAG38543.1; -; mRNA.
DR   EMBL; AF191495; AAG28379.1; -; mRNA.
DR   EMBL; AF490407; AAO84556.1; -; Genomic_DNA.
DR   EMBL; BT020103; AAV38906.1; -; mRNA.
DR   EMBL; AL591806; CAI15365.1; -; Genomic_DNA.
DR   EMBL; AK075152; BAC11436.1; -; mRNA.
DR   SMR; Q6FIB4; 25-233.
DR   Ensembl; ENSG00000158769; Homo sapiens.
DR   GO; GO:0004872; F:receptor activity; IEA.
DR   InterPro; IPR003599; Ig.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   InterPro; IPR003596; Ig_v.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00409; IG; 2.
DR   SMART; SM00408; IGc2; 2.
DR   SMART; SM00406; IGv; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Receptor.
SQ   SEQUENCE   299 AA;  32583 MW;  D95DE2FEA23D2851 CRC64;

  Query Match             25.2%;  Score 404;  DB 2;  Length 299;
  Best Local Similarity   35.2%;  Pred. No. 2.4e-24;
  Matches  102;  Conservative   46;  Mismatches  126;  Indels   16;  Gaps    7;

Qy          2 ARRSRHRLLLLLLRYLV--VALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSS 59
              |:  |  | | :|  |:  :|||       :    :  |    |      |:|     : |
Db          5 AQVERKLLCLFILAILLCSLALG-----SVTVHSSEPEVRIPENNPVKLSCAYSGFS-SP 58

Qy         60 RLEWK-KLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
              |:|||   | :   | |   :   :::|   :   |  |:||| | | | | ||   | |
Db         59 RVEWKFDQGDTTRLVCYNNKITASYEDRVTFLPTGITFKSVTREDTGTYTCMVS--EEGG 116

Qy        119 QNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
              :  |  | | ||| |: |:  :|||| |    | | :::|:|  |||||||| :  |
Db        117 NSYGEVKVKLIVLVPPSKPTVNIPSSATIGNRAVLTCSEQDGSPPSEYTWFKDGIVMPTN 176

Qy        179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNI 237
              |:     :|||| :|  || | |: :|  ||||||||||  |        ||:  : |:
Db        177 PKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEYSCEARNGYGTPMTSNAVRMEAVERNV 236

Qy        238 SGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSE 287
                :|||:|  ::: :   |: :|  :|:| :     |  :|||    |:
Db        237 GVIVAAVLVTLILLGILVFGIWFAYSRGHFDR----TKKGTSSKKVIYSQ 282
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RESULT 15
JAM1_BOVIN
ID   JAM1_BOVIN     STANDARD;      PRT;   298 AA.
AC   Q9XT56;
DT   16-OCT-2001 (Rel. 40, Created)
DT   16-OCT-2001 (Rel. 40, Last sequence update)
DT   13-SEP-2005 (Rel. 48, Last annotation update)
DE   Junctional adhesion molecule A precursor (JAM-A) (Junctional adhesion
DE   molecule 1) (JAM).
GN   Name=F11R; Synonyms=JAM1;
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
OC   Pecora; Bovidae; Bovinae; Bos.
OX   NCBI_TaxID=9913;
RN   [1]
RP   NUCLEOTIDE SEQUENCE.
RX   MEDLINE=99323940; PubMed=10395639;
RA   Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA   Iwamatsu A., Kita T.;
RT   "Combined treatment of TNF-alpha and IFN-gamma causes redistribution
RT   of junctional adhesion molecule in human endothelial cells.";
RL   J. Immunol. 163:553-557(1999).
CC   -!- FUNCTION: Seems to plays a role in epithelial tight junction
CC       formation. Appears early in primordial forms of cell junctions and
CC       recruits PARD3. The association of the PARD6-PARD3 complex may
CC       prevent the interaction of PARD3 with JAM1, thereby preventing
CC       tight junction assembly (By similarity). Plays a role in
CC       regulating monocyte transmigration involved in integrity of
CC       epithelial barrier. Involved in platelet activation.
CC   -!- SUBUNIT: Interacts with the first PDZ domain of PARD3. The
CC       association between PARD3 and PARD6B probably disrupts this
CC       interaction. Interacts with the ninth PDZ domain of MPDZ (By
CC       similarity).
CC   -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC       Localized at tight junctions of both epithelial and endothelial
CC       cells (By similarity).
CC   -!- SIMILARITY: Belongs to the immunoglobulin superfamily.
CC   -!- SIMILARITY: Contains 2 Ig-like V-type (immunoglobulin-like)
CC       domains.
CC   ----------------------------------------------------------------------
CC   This Swiss-Prot entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use as long as its content is in no way modified and this statement is not
CC   removed.
CC   ----------------------------------------------------------------------
DR   EMBL; AF111714; AAD42051.1; -; mRNA.
DR   HSSP; Q9Y624; 1NBQ.
DR   SMR; Q9XT56; 24-232.
DR   InterPro; IPR007110; Ig-like.
DR   InterPro; IPR003598; Ig_c2.
DR   Pfam; PF00047; ig; 1.
DR   SMART; SM00408; IGc2; 1.
DR   PROSITE; PS50835; IG_LIKE; 2.
KW   Glycoprotein; Immunoglobulin domain; Repeat; Signal; Tight junction;
KW   Transmembrane.
FT   SIGNAL        1     24       Potential.
FT   CHAIN        25    298       Junctional adhesion molecule A.
FT   TOPO_DOM     25    237       Extracellular (Potential).
FT   TRANSMEM    238    258       Potential.
FT   TOPO_DOM    259    298       Cytoplasmic (Potential).
FT   DOMAIN       28    124       Ig-like V-type 1.
FT   DOMAIN      134    227       Ig-like V-type 2.
FT   CARBOHYD    184    184       N-linked (GlcNAc. . .) (Potential).
FT   DISULFID     49    108       Potential.
FT   DISULFID    152    211       Potential.
SQ   SEQUENCE   298 AA;  32456 MW;  714FE1C1714769A2 CRC64;

  Query Match             25.1%;  Score 402.5;  DB 1;  Length 298;
  Best Local Similarity   36.2%;  Pred. No. 3.2e-24;
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  Matches  104;  Conservative   42;  Mismatches  116;  Indels   25;  Gaps    9;

Qy          9 LLL---LLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSRLEWK- 64
              |||   ::|  | :  |  : |       : ||   |   | |:|     : | |:|||
Db         12 LLLFTSMILCSLALGRGAVQTY-------EPVVRVPENNPAKLSCSYSGFS-SPRVEWKF 63

Qy         65 KLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEED 124
                |      | |   :   ::||     |  |   :||| | | | | ||   | |    |
Db         64 THGDIRGLVCYNNKITASYENRVTFSDTGITFHSVTRKDTGMYTCMVS--DEGGNTYGEV 121

Qy        125 TVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQ 184
              || | ||| |: |:  |||   ||   | | :::|:|  || |||||: :   |:
Db        122 TVQLIVLVPPSKPTINVPSSVTIGTRAVLTCSERDGSPPSEYKWFKDGVEMPLEPKSNRA 181

Qy        185 STNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK----RMQVDDLNISGI 240
               :|||||:| ||| | |: ||  |||:::|:|:|  ||   | |     |   :||: ||
Db        182 FSNSSYTLNQKTGELIFDPVSASDTGDFTCQAQN--GY-ASPVKSDTVHMDAVELNVGGI 238

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSE 287
              :||| |  :::     |: :|  :||| :     |  :|:|    |:
Db        239 VAAVFVTLILLGALIFGIWFAYSRGYFDR----AKKGTSNKKVIYSQ 281


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Job time : 233 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:31:29 ; Search time 164 Seconds
(without alignments)
794.895 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA_Main:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US11_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1605	100.0	312	3	US-09-909-320-64	Sequence 64, Appl
2	1605	100.0	312	3	US-09-909-088B-64	Sequence 64, Appl
3	1605	100.0	312	3	US-09-905-291A-64	Sequence 64, Appl
4	1605	100.0	312	3	US-09-953-499-9	Sequence 9, Appli
5	1605	100.0	312	3	US-09-902-853-64	Sequence 64, Appl
6	1605	100.0	312	3	US-09-907-824-64	Sequence 64, Appl
7	1605	100.0	312	3	US-09-907-841-64	Sequence 64, Appl
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9	1605	100.0	312	3	US-09-903-640-64	Sequence 64, Appl
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14	1605	100.0	312	3	US-09-907-942-64	Sequence 64, Appl
15	1605	100.0	312	3	US-09-904-859-64	Sequence 64, Appl
16	1605	100.0	312	3	US-09-909-204-64	Sequence 64, Appl
17	1605	100.0	312	3	US-09-904-820-64	Sequence 64, Appl
18	1605	100.0	312	3	US-09-904-786-64	Sequence 64, Appl
19	1605	100.0	312	3	US-09-906-646-64	Sequence 64, Appl
20	1605	100.0	312	3	US-09-906-700-64	Sequence 64, Appl
21	1605	100.0	312	3	US-09-903-786-64	Sequence 64, Appl
22	1605	100.0	312	3	US-09-902-903-64	Sequence 64, Appl
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32	1605	100.0	312	3	US-09-903-520-64	Sequence 64, Appl
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36	1605	100.0	312	3	US-09-905-381-64	Sequence 64, Appl
37	1605	100.0	312	3	US-09-904-485-64	Sequence 64, Appl
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43	1605	100.0	312	3	US-09-902-634-64	Sequence 64, Appl
44	1605	100.0	312	3	US-09-902-713-64	Sequence 64, Appl
45	1605	100.0	312	3	US-09-907-979-64	Sequence 64, Appl

ALIGNMENTS

RESULT 1
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; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547

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;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-909-320-64

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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RESULT 2
US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/909,088B
;  CURRENT FILING DATE:  2001-07-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-909-088B-64

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Qy        301 KAAAGGSRGQEF 312
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; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/905,291A
;  CURRENT FILING DATE:  2001-07-12
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-905-291A-64

  Query Match           100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Qy        301 KAAAGGSRGQEF 312
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US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi J.
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Goddard, Audrey
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Napier, Mary A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Wood, William I.
;  TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
;  TITLE OF INVENTION:  OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
;  FILE REFERENCE: P1216R1(US)
;  CURRENT APPLICATION NUMBER: US/09/953,499
;  CURRENT FILING DATE:  2001-09-14
;  PRIOR APPLICATION NUMBER: US/09/254,465
;  PRIOR FILING DATE: 1999-03-05
;  PRIOR APPLICATION NUMBER: PCT/US98/24855
;  PRIOR FILING DATE: 1998-11-20
;  PRIOR APPLICATION NUMBER: US 60/066,364
;  PRIOR FILING DATE: 1997-11-21
;  PRIOR APPLICATION NUMBER: US 60/078,936
;  PRIOR FILING DATE: 1998-03-20
;  PRIOR APPLICATION NUMBER: PCT/US98/19437
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;  PRIOR FILING DATE: 1998-09-17
;  NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-953-499-9

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  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Qy        301 KAAAGGSRGQEF 312
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RESULT 5
US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/902,853
;  CURRENT FILING DATE:  2001-07-10
;  PRIOR APPLICATION NUMBER: US/09/665,350
;  PRIOR FILING DATE: 2000-09-18
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-902-853-64

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 6
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
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; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match 100.0%; Score 1605; DB 3; Length 312;
Best Local Similarity 100.0%; Pred. No. 3.6e-136;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 7
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28

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;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-907-841-64

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 8
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US20030003530A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/904,011
;  CURRENT FILING DATE:  2001-07-11
;  PRIOR APPLICATION NUMBER: 09/665,350
;  PRIOR FILING DATE: 2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-904-011-64

  Query Match             100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 9
US-09-903-640-64
; Sequence 64, Application US/09903640
; Publication No. US20030017463A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/903,640
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-903-640-64

Query Match 100.0%; Score 1605; DB 3; Length 312;
Best Local Similarity 100.0%; Pred. No. 3.6e-136;
Matches 312; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312
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RESULT 10
US-09-908-093-64
; Sequence 64, Application US/09908093
; Publication No. US20030017498A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/908,093
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
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; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02

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;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-908-093-64

  Query Match            100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
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Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 11
US-09-906-742-64
; Sequence 64, Application US/09906742
; Publication No. US20030023054A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/906,742
;  CURRENT FILING DATE:  2001-07-16
;  PRIOR APPLICATION NUMBER: 09/665,350
;  PRIOR FILING DATE: 2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
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;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-906-742-64

  Query Match            100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 12
US-09-906-838-64
; Sequence 64, Application US/09906838
; Publication No. US20030027143A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/906,838
;  CURRENT FILING DATE:  2001-07-16
;  PRIOR APPLICATION NUMBER: 09/665,350
;  PRIOR FILING DATE: 2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
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;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-906-838-64

  Query Match            100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
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Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
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Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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RESULT 13
US-09-907-613-64
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; Publication No. US20030027145A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/907,613
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;  CURRENT FILING DATE:  2001-07-17
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
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;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-907-613-64

  Query Match           100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
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Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
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Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 14
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; Sequence 64, Application US/09907942
; Publication No. US20030027146A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/907,942
;  CURRENT FILING DATE:  2002-01-22
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
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;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-907-942-64
```

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  Query Match           100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
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Db        301 KAAAGGSRGQEF 312


RESULT 15
US-09-904-859-64
; Sequence 64, Application US/09904859
; Publication No. US20030036060A1
; GENERAL INFORMATION:
;  APPLICANT: Genentech, Inc.
;  APPLICANT:  Ashkenazi, Avi
;  APPLICANT:  Botstein, David
;  APPLICANT:  Desnoyers, Luc
;  APPLICANT:  Eaton, Dan L.
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Filvaroff, Ellen
;  APPLICANT:  Fong, Sherman
;  APPLICANT:  Gao, Wei-Qiang
;  APPLICANT:  Gerber, Hanspeter
;  APPLICANT:  Gerritsen, Mary E.
;  APPLICANT:  Goddard, A.
;  APPLICANT:  Godowski, Paul J.
;  APPLICANT:  Grimaldi, Christopher J.
;  APPLICANT:  Gurney, Austin L.
;  APPLICANT:  Hillan, Kenneth, J.
;  APPLICANT:  Kljavin, Ivar J.
;  APPLICANT:  Mather, Jennie P.
;  APPLICANT:  Pan, James
;  APPLICANT:  Paoni, Nicholas F.
;  APPLICANT:  Roy, Margaret Ann
;  APPLICANT:  Stewart, Timothy A.
;  APPLICANT:  Tumas, Daniel
;  APPLICANT:  Williams, P. Mickey
;  APPLICANT:  Wood, William, I.
;  TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
;  TITLE OF INVENTION:  Acids Encoding the Same
;  FILE REFERENCE: 10466-14
;  CURRENT APPLICATION NUMBER: US/09/904,859
;  CURRENT FILING DATE:  2001-07-12
;  PRIOR APPLICATION NUMBER: 09/665,350
;  PRIOR FILING DATE: 2000-09-18
;  PRIOR APPLICATION NUMBER: PCT/US00/04414
;  PRIOR FILING DATE: 2000-02-22
;  PRIOR APPLICATION NUMBER: US 60/143,048
;  PRIOR FILING DATE: 1999-07-07
;  PRIOR APPLICATION NUMBER: US 60/145,698
;  PRIOR FILING DATE: 1999-07-26
;  PRIOR APPLICATION NUMBER: US 60/146,222
;  PRIOR FILING DATE: 1999-07-28
;  PRIOR APPLICATION NUMBER: PCT/US99/20594
;  PRIOR FILING DATE: 1999-09-08
;  PRIOR APPLICATION NUMBER: PCT/US99/20944
;  PRIOR FILING DATE: 1999-09-13
;  PRIOR APPLICATION NUMBER: PCT/US99/21090
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/21547
;  PRIOR FILING DATE: 1999-09-15
;  PRIOR APPLICATION NUMBER: PCT/US99/23089
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: PCT/US99/28214
;  PRIOR FILING DATE: 1999-11-29
;  PRIOR APPLICATION NUMBER: PCT/US99/28313
;  PRIOR FILING DATE: 1999-11-30
;  PRIOR APPLICATION NUMBER: PCT/US99/28564
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/28565
;  PRIOR FILING DATE: 1999-12-02
;  PRIOR APPLICATION NUMBER: PCT/US99/30095
;  PRIOR FILING DATE: 1999-12-16
;  PRIOR APPLICATION NUMBER: PCT/US99/30911
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US99/30999
;  PRIOR FILING DATE: 1999-12-20
;  PRIOR APPLICATION NUMBER: PCT/US00/00219
;  PRIOR FILING DATE: 2000-01-05
;  NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-09-904-859-64

  Query Match           100.0%;  Score 1605;  DB 3;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 3.6e-136;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


Search completed: December  6, 2005, 13:45:36
Job time : 166 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: December 6, 2005, 13:32:09 ; Search time 12 Seconds
(without alignments)
124.497 Million cell updates/sec

Title: US-10-785-607B-9
Perfect score: 1605
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....TPVIPALWKAAAGGSRGQEF 312

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 26661 seqs, 4788334 residues

Total number of hits satisfying chosen parameters: 26661

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA_New:*
1: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1605	100.0	312	6	US-10-131-826A-336	Sequence 336, App
2	461.5	28.8	310	6	US-10-131-826A-538	Sequence 538, App
3	461.5	28.8	362	6	US-10-821-234-1148	Sequence 1148, Ap
4	404	25.2	299	6	US-10-131-826A-366	Sequence 366, App
5	210	13.1	390	6	US-10-131-826A-338	Sequence 338, App
6	198.5	12.4	365	7	US-11-102-978-9	Sequence 9, Appli
7	163.5	10.2	373	6	US-10-131-826A-388	Sequence 388, App
8	156	9.7	1897	6	US-10-821-234-1635	Sequence 1635, Ap
9	155	9.7	298	7	US-11-085-812-4	Sequence 4, Appli
10	155	9.7	330	7	US-11-085-812-2	Sequence 2, Appli
11	154.5	9.6	4419	6	US-10-821-234-1155	Sequence 1155, Ap
12	149.5	9.3	7968	7	US-11-186-731-5	Sequence 5, Appli
13	143.5	8.9	398	6	US-10-131-826A-348	Sequence 348, App
14	143.5	8.9	1694	7	US-11-135-855-36	Sequence 36, Appl
15	143.5	8.9	1709	7	US-11-135-855-35	Sequence 35, Appl
16	136	8.5	500	7	US-11-102-240-84	Sequence 84, Appl
17	134.5	8.4	290	7	US-11-113-424-77	Sequence 77, Appl
18	131.5	8.2	344	6	US-10-131-826A-376	Sequence 376, App
19	126.5	7.9	419	6	US-10-821-234-1664	Sequence 1664, Ap
20	126	7.9	1338	6	US-10-821-234-1622	Sequence 1622, Ap
21	126	7.9	1338	7	US-11-109-156-23	Sequence 23, Appl
22	126	7.9	2630	7	US-11-186-731-2	Sequence 2, Appli
23	125.5	7.8	282	7	US-11-102-240-60	Sequence 60, Appl
24	123	7.7	442	6	US-10-821-234-1594	Sequence 1594, Ap
25	123	7.7	740	7	US-11-137-465-61	Sequence 61, Appl
26	123	7.7	1250	7	US-11-137-465-62	Sequence 62, Appl
27	118.5	7.4	1119	6	US-10-131-826A-352	Sequence 352, App
28	118	7.4	1189	6	US-10-821-234-1209	Sequence 1209, Ap
29	116	7.2	332	6	US-10-131-826A-386	Sequence 386, App
30	114.5	7.1	426	6	US-10-821-234-1585	Sequence 1585, Ap
31	114.5	7.1	555	6	US-10-821-234-1015	Sequence 1015, Ap
32	109.5	6.8	77	7	US-11-113-424-189	Sequence 189, App
33	109.5	6.8	466	7	US-11-102-240-104	Sequence 104, App
34	108.5	6.8	450	6	US-10-131-826A-378	Sequence 378, App
35	108	6.7	391	6	US-10-996-628-2	Sequence 2, Appli
36	105.5	6.6	592	7	US-11-135-855-24	Sequence 24, Appl
37	103.5	6.4	477	6	US-10-131-826A-50	Sequence 50, Appl
38	103	6.4	428	6	US-10-131-826A-292	Sequence 292, App
39	102.5	6.4	409	6	US-10-821-234-892	Sequence 892, App
40	101.5	6.3	334	6	US-10-689-742-134	Sequence 134, App
41	100.5	6.3	290	7	US-11-113-424-78	Sequence 78, Appl
42	99.5	6.2	640	6	US-10-131-826A-368	Sequence 368, App
43	98	6.1	898	6	US-10-624-932-2	Sequence 2, Appli
44	96	6.0	394	6	US-10-131-826A-520	Sequence 520, App
45	95.5	6.0	269	6	US-10-821-234-1308	Sequence 1308, Ap

ALIGNMENTS

RESULT 1
US-10-131-826A-336
; Sequence 336, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
; APPLICANT: Baker,Kevin P.
; APPLICANT: Beresini,Maureen
; APPLICANT: DeForge,Laura
; APPLICANT: Desnoyers,Luc
; APPLICANT: Filvaroff,Ellen
; APPLICANT: Gao,Wei-Qiang
; APPLICANT: Gerritsen,Mary E.
; APPLICANT: Goddard,Audrey
; APPLICANT: Godowski,Paul J.
; APPLICANT: Gurney,Austin L.
; APPLICANT: Sherwood,Steven
; APPLICANT: Smith,Victoria
; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C128
; CURRENT APPLICATION NUMBER: US/10/131,826A
; CURRENT FILING DATE: 2002-04-24
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.

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;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 336
;   LENGTH: 312
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-131-826A-336

  Query Match            100.0%;  Score 1605;  DB 6;  Length 312;
  Best Local Similarity  100.0%;  Pred. No. 1.5e-128;
  Matches  312;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MARRSRHRLLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSSR 60

Qy         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 LEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQN 120

Qy        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 LEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNISGI 240

Qy        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 IAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALW 300

Qy        301 KAAAGGSRGQEF 312
              ||||||||||||
Db        301 KAAAGGSRGQEF 312


RESULT 2
US-10-131-826A-538
; Sequence 538, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C128
;  CURRENT APPLICATION NUMBER: US/10/131,826A
;  CURRENT FILING DATE:  2002-04-24
;  PRIOR APPLICATION NUMBER: 60/049911
;  PRIOR FILING DATE: 1997-06-18
;  PRIOR APPLICATION NUMBER: 60/056974
;  PRIOR FILING DATE: 1997-08-26
;  PRIOR APPLICATION NUMBER: 60/059113
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059115
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059117
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059122
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059184
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059263
;  PRIOR FILING DATE: 1997-09-18
;  PRIOR APPLICATION NUMBER: 60/059352
;  PRIOR FILING DATE: 1997-09-19
;  PRIOR APPLICATION NUMBER: 60/059588
;  PRIOR FILING DATE: 1997-09-19
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 538
;   LENGTH: 310
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-131-826A-538

  Query Match            28.8%;  Score 461.5;  DB 6;  Length 310;
  Best Local Similarity  37.1%;  Pred. No. 2.9e-32;
  Matches  104;  Conservative   52;  Mismatches  103;  Indels   21;  Gaps    7;

Qy          1 MARRSRHRL----------LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILAC 50
              || |   ||          |||| |  ::      |   :     ||   |::   |:|
Db          1 MALRRPPRLRLCARLPDFFLLLLFRGCLIG-----AVNLKSSNRTPVVQ--EFESVELSC 53

Qy         51 -KTPKKTVSSRLEWKKL-GRSVSFVYYQQTLQGDFKNRAEMI-DFNIRIKNVTRSDAGKY 107
               |  :|   |:||||:     ::|::   :|||   |||::   :::| |||| |:  |
Db         54 IITDSQTSDPRIEWKKIQDEQTTYVFFDNKIQGDLAGRAEILGKTSLKIWNVTRRDSALY 113

Qy        108 RCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYT 167
              |||| | ::: : ::|  : | | | |  | | || :   | :  | ||: ||:| | |:
Db        114 RCEVVARNDR-KEIDEIVIELTVQVKPVTPVCRVPKAVPVGKMATLHCQESEGHPRPHYS 172

Qy        168 WFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPG 227
              |::: : |  : |   :  |||: :|::|||| |  | | |:|:| | | |  |  ||
Db        173 WYRNDVPLPTDSRANPRFRNSSFHLNSETGTLVFTAVHKDDSGQYYCIASNDAGSARCEE 232

Qy        228 KRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYF 267
              : |:| |||| |||  |:||  |:::  ||:| | |:|||
Db        233 QEMEVYDLNIGGIIGGVLVVLAVLALITLGICCAYRRGYF 272


RESULT 3
US-10-821-234-1148
; Sequence 1148, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
;  APPLICANT: Labat, Ivan
;  APPLICANT:  Stache-Crain, Birgit
;  APPLICANT:  Andarmani, Susan
;  APPLICANT:  Tang, Y. Tom
;  TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
;  FILE REFERENCE: 821A
;  CURRENT APPLICATION NUMBER: US/10/821,234
;  CURRENT FILING DATE:  2004-04-07
;  PRIOR APPLICATION NUMBER: US 60/462,047
;  PRIOR FILING DATE: 2003-04-07
;  NUMBER OF SEQ ID NOS: 1704
;  SOFTWARE: pt_SEQ_genes Version 1.0
; SEQ ID NO 1148
;   LENGTH: 362
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-821-234-1148

  Query Match            28.8%;  Score 461.5;  DB 6;  Length 362;
  Best Local Similarity  37.1%;  Pred. No. 3.5e-32;
  Matches  104;  Conservative   52;  Mismatches  103;  Indels   21;  Gaps    7;

Qy          1 MARRSRHRL----------LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILAC 50
              || |   ||          |||| |  ::      |   :     ||   |::   |:|
Db         53 MALRRPPRLRLCARLPDFFLLLLFRGCLIG-----AVNLKSSNRTPVVQ--EFESVELSC 105
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Qy          51 -KTPKKTVSSRLEWKKL-GRSVSFVYYQQTLQGDFKNRAEMI-DFNIRIKNVTRSDAGKY 107
Db         106 IITDSQTSDPRIEWKKIQDEQTTYVFFDNKIQGDLAGRAEILGKTSLKIWNVTRRDSALY 165

Qy         108 RCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYT 167
Db         166 RCEVVARNDR-KEIDEIVIELTVQVKPVTPVCRVPKAVPVGKMATLHCQESEGHPRPHYS 224

Qy         168 WFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPG 227
Db         225 WYRNDVPLPTDSRANPRFRNSSFHLNSETGTLVFTAVHKDDSGQYYCIASNDAGSARCEE 284

Qy         228 KRMQVDDLNISGIIAAVVVVALVISVCGLGVCYAQRKGYF 267
Db         285 QEMEVYDLNIGGIIGGVLVVLAVLALITLGICCAYRRGYF 324


RESULT 4
US-10-131-826A-366
; Sequence 366, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C128
;  CURRENT APPLICATION NUMBER: US/10/131,826A
;  CURRENT FILING DATE:  2002-04-24
;  PRIOR APPLICATION NUMBER: 60/049911
;  PRIOR FILING DATE: 1997-06-18
;  PRIOR APPLICATION NUMBER: 60/056974
;  PRIOR FILING DATE: 1997-08-26
;  PRIOR APPLICATION NUMBER: 60/059113
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059115
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059117
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059122
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059184
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059263
;  PRIOR FILING DATE: 1997-09-18
;  PRIOR APPLICATION NUMBER: 60/059352
;  PRIOR FILING DATE: 1997-09-19
;  PRIOR APPLICATION NUMBER: 60/059588
;  PRIOR FILING DATE: 1997-09-19
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 366
;   LENGTH: 299
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-131-826A-366

  Query Match           25.2%;  Score 404;  DB 6;  Length 299;
  Best Local Similarity  35.2%;  Pred. No. 1.9e-27;
  Matches  102;  Conservative   46;  Mismatches  126;  Indels   16;  Gaps    7;

Qy           2 ARRSRHRLLLLLLRYLV--VALGYHKAYGFSAPKDQQVVTAVEYQEAILACKTPKKTVSS 59
Db           5 AQVERKLLCLFILAILLCSLALG-----SVTVHSSEPEVRIPENNPVKLSCAYSGFS-SP 58

Qy          60 RLEWK-KLGRSVSFVYYQQTLQGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQG 118
Db          59 RVEWKFDQGDTTRLVCYNNKITASYEDRVTFLPTGITFKSVTREDTGTYTCMVS--EEGG 116

Qy         119 QNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Db         117 NSYGEVKVKLIVLVPPSKPTVNIPSSATIGNRAVLTCSEQDGSPPSEYTWFKDGIVMPTN 176

Qy         179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNI 237
Db         177 PKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEYSCEARNGYGTPMTSNAVRMEAVERNV 236

Qy         238 SGIIAAVVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSE 287
Db         237 GVIVAAVLVTLILLGILVFGIWFAYSRGHFDR----TKKGTSSKKVIYSQ 282


RESULT 5
US-10-131-826A-338
; Sequence 338, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C128
;  CURRENT APPLICATION NUMBER: US/10/131,826A
;  CURRENT FILING DATE:  2002-04-24
;  PRIOR APPLICATION NUMBER: 60/049911
;  PRIOR FILING DATE: 1997-06-18
;  PRIOR APPLICATION NUMBER: 60/056974
;  PRIOR FILING DATE: 1997-08-26
;  PRIOR APPLICATION NUMBER: 60/059113
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059115
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059117
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059122
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059184
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059263
;  PRIOR FILING DATE: 1997-09-18
;  PRIOR APPLICATION NUMBER: 60/059352
;  PRIOR FILING DATE: 1997-09-19
;  PRIOR APPLICATION NUMBER: 60/059588
;  PRIOR FILING DATE: 1997-09-19
;  Remaining Prior Application data removed - See File Wrapper or PALM.
```

```
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 338
;   LENGTH: 390
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-131-826A-338

  Query Match             13.1%;  Score 210;  DB 6;  Length 390;
  Best Local Similarity   27.9%;  Pred. No. 5.8e-11;
  Matches   78;  Conservative   43;  Mismatches  105;  Indels   54;  Gaps   11;

Qy          9 LLLLLLRYLVVALGYHKAYGFSAPKDQQV--------VTAVEYQEAIL-ACKTPKKTVSS 59
              |:  |||:| : |        : |   |:        : |||  | :| |  |    |||
Db          8 LVTNLLRFLFLGLS-----ALAPPSRAQLQLHLPANRLQAVEGGEVVLPAWYTLHGEVSS 62

Qy         60 RLEWKKLGRSVSFV--YYQQTLQGD----------FKNRAEMI------DFNIRIKNVT 100
                 |:     | ||  :::|  : |            |    ::      : ::|:: :
Db         63 SQPWE-----VPFVMWFFKQKEKEDQVLSYINGVTTSKPGVSLVYSMPSRNLSLRLEGLQ 117

Qy        101 RSDAGKYRCEVSAPSEQGQNLEEDTVTLE--VLVAPAVPSCEVPSSALSGTVVELRCQDK 158
                |:| | | |:   :||::       |||  ||| || ||| :       |  | | ||
Db        118 EKDSGPYSCSVNVQDKQGKSRGHSIKTLELNVLVPPAPPSCRLQGVPHVGANVTLSCQSP 177

Qy        159 EGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARN 218
                || :| |          : :| |  |  :  ::   |:|    :|    | | |:| |
Db        178 RSKPAVQYQW---------DRQLPSFQTFFAPALDVIRGSLSLTNLSSSMAGVYVCKAHN 228

Qy        219 SVGYRRCPGKRMQVDDLNISGIIAAVVVVALVISVCGLGV 258
                ||  :|    ::|     :|  ||||  |:| :: |||:
Db        229 EVGTAQC-NVTLEVS----TGPGAAVVAGAVVGTLVGLGL 263


RESULT 6
US-11-102-978-9
; Sequence 9, Application US/11102978
; Publication No. US20050250142A1
; GENERAL INFORMATION:
;  APPLICANT: University of Utah Technology Transfer Office
;  APPLICANT:  University of Utah Research Foundation
;  TITLE OF INVENTION: Diagnosis and Treatment of Herpes Simplex Virus Disease
;  FILE REFERENCE: 0274-5537.1US
;  CURRENT APPLICATION NUMBER: US/11/102,978
;  CURRENT FILING DATE:  2005-04-11
;  PRIOR APPLICATION NUMBER: PCT/US2003/033152
;  PRIOR FILING DATE: 2003-10-18
;  PRIOR APPLICATION NUMBER: 60/419,576
;  PRIOR FILING DATE: 2002-10-18
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 9
;   LENGTH: 365
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-11-102-978-9

  Query Match             12.4%;  Score 198.5;  DB 7;  Length 365;
  Best Local Similarity   23.3%;  Pred. No. 5e-10;
  Matches   67;  Conservative   58;  Mismatches  122;  Indels   41;  Gaps    9;

Qy         10 LLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACK---TPKKTVSSRLEW--- 63
              |||     |   : : ::   : |  ::::   : : | | ||   :|:      :||
Db          3 LLLCFVLLCGVVDFARSLSITTP--EEMIEKAKGETAYLPCKFTLSPEDQGPLDIEWLIS 60

Qy         64 ----KKLGRSVSFVYYQQTLQGDF----------KNRAEMIDFNIRIKNVTRSDAGKYR 108
                  :|: : |  :|    :  |:           |  :  | :| : |:  || | |:
Db         61 PADNQKVDQ-VIILYSGDKIYDDYYPDLKGRVHFTSNDLKSGDASINVTNLQLSDIGTYQ 119

Qy        109 CEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTW 168
              |:|    ::   :   : | ||| |:   | |  |   |:  :::|: |||:   :| |
Db        120 CKV----KKAPGVANKKIHLVVLVKPSGARCYVDGSEEIGSDFKIKCEPKEGSLPLQYEW 175

Qy        169 FKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK 228
                |            ||   :|:     :  :     |   :| |||  || ||  :|  :

Db        176 QK---------LSDSQKMPTSWLAEMTSSVISVKNASSEYSGTYSCTVRNRVGSDQCLLR 226

Qy        229 RMQVDDLNISGIIA-AVVVVALVISVCGLGVCYAQRKGYFSKETSFQK 275
                 |   | :|:|| |::   | ::: || :   ::|    :|  ::|
Db        227 LNVVPPSNKAGLIAGAIIGTLLALALIGLIIFCCRKK---RREEKYEK 271


RESULT 7
US-10-131-826A-388
; Sequence 388, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C128
;  CURRENT APPLICATION NUMBER: US/10/131,826A
;  CURRENT FILING DATE:  2002-04-24
;  PRIOR APPLICATION NUMBER: 60/049911
;  PRIOR FILING DATE: 1997-06-18
;  PRIOR APPLICATION NUMBER: 60/056974
;  PRIOR FILING DATE: 1997-08-26
;  PRIOR APPLICATION NUMBER: 60/059113
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059115
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059117
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059122
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059184
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059263
;  PRIOR FILING DATE: 1997-09-18
;  PRIOR APPLICATION NUMBER: 60/059352
;  PRIOR FILING DATE: 1997-09-19
;  PRIOR APPLICATION NUMBER: 60/059588
;  PRIOR FILING DATE: 1997-09-19
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 388
;   LENGTH: 373
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-131-826A-388

  Query Match             10.2%;  Score 163.5;  DB 6;  Length 373;
  Best Local Similarity   24.2%;  Pred. No. 4.5e-07;
  Matches   65;  Conservative   45;  Mismatches  112;  Indels   47;  Gaps   11;

Qy          9 LLLLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACK----TPKKTVSSRLEW- 63
              |||||: | |  || |                :  |  ::  | |       |:|     :||
Db          5 LLLLLVSYYVGTLGTHTE-----------IKRVAEEKVTLPCHHQLGLPEKDTLD-IEWL 52

Qy         64 -------KKLGRSVSFVYYQQTLQGDFKNRAEMI------DFNIRIKNVTRSDAGKYRCE 110
                    :|:  : |  :     |  : | |           | :::|: :  || |:| |:
Db         53 LTDNEGNQKVVITYSSRHVYNNLTEEQKGRVAFASNFLAGDASLQIEPLKPSDEGRYTCK 112
```

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Qy        111 VSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFK 170
              |       |: :    | |:||| |: | ||:       |: : |:|:   |      | | :
Db        113 V---KNSGRYVWSH-VILKVLVRPSKPKCELEGELTEGSDLTLQCESSSGTEPIVYYWQR 168

Qy        171 DGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRM 230
                :  |: ||  :|     |       | :    ::   :| | | | | |    |   |:
Db        169 IREKEGEDERLPPKS-RIDY---NHPGRVLLQNLTMSYSGLYQCTAGNEAGKESCV-VRV 223

Qy        231 QVDDLN--------ISGIIAAVVVVALVI 251
              |   :        ::||:|  ::: |::
Db        224 TVQYVQSIGMVAGAVTGIVAGALLIFLLV 252


RESULT 8
US-10-821-234-1635
; Sequence 1635, Application US/10821234
; Publication No. US20050255114A1
; GENERAL INFORMATION:
;  APPLICANT: Labat, Ivan
;  APPLICANT:  Stache-Crain, Birgit
;  APPLICANT:  Andarmani, Susan
;  APPLICANT:  Tang, Y. Tom
;  TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
;  FILE REFERENCE: 821A
;  CURRENT APPLICATION NUMBER: US/10/821,234
;  CURRENT FILING DATE:  2004-04-07
;  PRIOR APPLICATION NUMBER: US 60/462,047
;  PRIOR FILING DATE: 2003-04-07
;  NUMBER OF SEQ ID NOS: 1704
;  SOFTWARE: pt_SEQ_genes Version 1.0
; SEQ ID NO 1635
;   LENGTH: 1897
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-821-234-1635

  Query Match             9.7%;  Score 156;  DB 6;  Length 1897;
  Best Local Similarity   25.8%;  Pred. No. 1.5e-05;
  Matches   59;  Conservative   35;  Mismatches   89;  Indels   46;  Gaps   10;

Qy         11 LLLLRYLVVALGYHKAYGFSAPKDQQVVTAVEYQEAILACKT---PKKTVSSRLEWKKLG 67
              |::|  :  | |  |      |:||   | :    |   |:    ||     |: | | |
Db          8 LVMLGLVAGAHGDSKPVFIKVPEDQ---TGLSGGVASFVCQATGEPK----PRITWMKKG 60

Qy         68 RSVSFVYYQQTLQGDFKNRAEMIDFN------IRIKNV-TRSDAGKYRCEVSAPSEQGQN 120
              : ||               | |:|:|:      :||: :  : |   | |  :    :
Db         61 KKVS-----------SQRFEVIEFDDGAGSVLRIQPLRVQRDEAIYECTATNSLGEINT 108

Qy        121 LEEDTVTLEVLVAPAVPSCE------VPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIR 174
              : :|  |  : |  || :      |   | : |::   |    ||| || :|||| :
Db        109 SAKLSVLEEEQLPPGFPSIDMGPQLKVVEKARTATML---CA-AGGNPDPEISWFKDFLP 164

Qy        175 LLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYR 223
              :         :|::      ::| ||  :  : | |:| | | || | |
Db        165 V-------DPATSNGRIKQLRSGALQIESSEESDQGKYECVATNSAGTR 206


RESULT 9
US-11-085-812-4
; Sequence 4, Application US/11085812
; Publication No. US20050261186A1
; GENERAL INFORMATION:
;  APPLICANT: Marchionni, Mark
;  TITLE OF INVENTION: NRG-2 NUCLEIC ACID MOLECULES,
;  TITLE OF INVENTION:  POLYPEPTIDES, AND DIAGNOSTIC AND THERAPEUTIC METHODS
;  FILE REFERENCE: 04585/049002
;  CURRENT APPLICATION NUMBER: US/11/085,812
;  CURRENT FILING DATE:  2005-03-21
;  PRIOR APPLICATION NUMBER: US 60/206,495
;  PRIOR FILING DATE: 2000-05-23
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 298
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-11-085-812-4

  Query Match             9.7%;  Score 155;  DB 7;  Length 298;
  Best Local Similarity   27.7%;  Pred. No. 1.8e-06;
  Matches   56;  Conservative   24;  Mismatches   86;  Indels   36;  Gaps    8;

Qy         66 LGRSVSFVYYQQTLQGD--FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEE 123
              | |:  :::: :  :    ||     :| |   ||: : : ||  |    |   : : ::
Db         96 LERNQRYIPFLEPTEQPLVFKTAFAPLDTN--GKNL-KKEVGKILCTDCATRPKLKKMKS 152

Qy        124 DTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 183
              | :                    |    |:|:   ||| | | |||||  |       |
Db        153 QTGQV------------------GEKQSLKCEAAAGNPQPSYRWFKDGKELNR-----S 188

Qy        184 QSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNI-----S 238
              :      |    |  |||| |   | ||| ||| | :|     | |: |: ::      |
Db        189 RDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLYVNSVSTTLSSWS 247

Qy        239 GIIAAVVVVALVISVCGLGVCY 260
              |       |   | | ||||
Db        248 GHARKCNETAKSYCVNG-GVCY 268


RESULT 10
US-11-085-812-2
; Sequence 2, Application US/11085812
; Publication No. US20050261186A1
; GENERAL INFORMATION:
;  APPLICANT: Marchionni, Mark
;  TITLE OF INVENTION: NRG-2 NUCLEIC ACID MOLECULES,
;  TITLE OF INVENTION:  POLYPEPTIDES, AND DIAGNOSTIC AND THERAPEUTIC METHODS
;  FILE REFERENCE: 04585/049002
;  CURRENT APPLICATION NUMBER: US/11/085,812
;  CURRENT FILING DATE:  2005-03-21
;  PRIOR APPLICATION NUMBER: US 60/206,495
;  PRIOR FILING DATE: 2000-05-23
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;   LENGTH: 330
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-11-085-812-2

  Query Match             9.7%;  Score 155;  DB 7;  Length 330;
  Best Local Similarity   27.7%;  Pred. No. 2e-06;
  Matches   56;  Conservative   24;  Mismatches   86;  Indels   36;  Gaps    8;

Qy         66 LGRSVSFVYYQQTLQGD--FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGQNLEE 123
              | |:  :::: :  :    ||     :| |   ||: : : ||  |    |   : : ::
Db         96 LERNQRYIPFLEPTEQPLVFKTAFAPLDTN--GKNL-KKEVGKILCTDCATRPKLKKMKS 152

Qy        124 DTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 183
              | :                    |    |:|:   ||| | | |||||  |       |
Db        153 QTGQV------------------GEKQSLKCEAAAGNPQPSYRWFKDGKELNR-----S 188

Qy        184 QSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNI-----S 238
              :      |    |  |||| |   | ||| ||| | :|     | |: |: ::      |
Db        189 RDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLYVNSVSTTLSSWS 247

Qy        239 GIIAAVVVVALVISVCGLGVCY 260
              |       |   | | ||||
Db        248 GHARKCNETAKSYCVNG-GVCY 268


RESULT 11
US-10-821-234-1155
; Sequence 1155, Application US/10821234
; Publication No. US20050255114A1
```

```
; GENERAL INFORMATION:
;  APPLICANT: Labat, Ivan
;  APPLICANT:  Stache-Crain, Birgit
;  APPLICANT:  Andarmani, Susan
;  APPLICANT:  Tang, Y. Tom
;  TITLE OF INVENTION: Methods for Diagnosis and Treatment of Preeclampsia
;  FILE REFERENCE: 821A
;  CURRENT APPLICATION NUMBER: US/10/821,234
;  CURRENT FILING DATE:  2004-04-07
;  PRIOR APPLICATION NUMBER: US 60/462,047
;  PRIOR FILING DATE: 2003-04-07
;  NUMBER OF SEQ ID NOS: 1704
;  SOFTWARE: pt_SEQ_genes Version 1.0
; SEQ ID NO 1155
;   LENGTH: 4419
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-821-234-1155

  Query Match             9.6%;  Score 154.5;  DB 6;  Length 4419;
  Best Local Similarity   24.5%;  Pred. No. 5.6e-05;
  Matches   74;  Conservative   26;  Mismatches  129;  Indels   73;  Gaps   12;

Qy         31 APKDQQVVTAVEYQ--------EAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGD 82
              ||      ||  | :         :    |    |: :  | | :|              |
Db       1794 APSKPITVTVEEQRSQSVRPGADVTFICTAKSKSPAYTLVWTRLH------------NGK 1841

Qy         83 FKNRAEMIDFN--IRIKNVTRSDAGKYRCEVSAPSEQGQN---LEEDTVTLEV-----LV 132
                ||  :|||  : |:||  |||| | |         | |   ::: | || |     |
Db       1842 LPTRA--MDFNGILTIRNVQLSDAGTYVC-------TGSNMFAMDQGTATLHVQASGTLS 1892

Qy        133 APAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYTM 192
              || |       :   | : | ||    |:| |   |              |
Db       1893 APVVSIHPPQLTVQPGQLAEFRC-SATGSPTPTLEW------------TGGPGGQLPAKA 1939

Qy        193 NTKTGTLQFNTVSKLDTGEYSCEARNSVGYRRC---------PGKRMQVDDLNISGIIAA 243
                | |:   |   |  :| | | :| | :            | |:||        : |
Db       1940 QIHGGILRLPAVEPTDQAQYLCRAHSSAGQQVARAVLHVHGGGGPRVQVSPERTQ--VHA 1997

Qy        244 VVVVALVISVCGLGVCYAQRKGYFSKETSFQKSNSSSKATTMSENVQWLTPVIPALWKAA 303
                | |           | :  | |   :::|    |       ||     | :|||:  |
Db       1998 GRTVRL----------YCRAAGVPSATITWRKEGGSLPPQARSERTDIATLLIPAITTAD 2047

Qy        304 AG 305
              ||
Db       2048 AG 2049


RESULT 12
US-11-186-731-5
; Sequence 5, Application US/11186731
; Publication No. US20050255521A1
; GENERAL INFORMATION:
;  APPLICANT: Kapeller-Libermann, Rosana
;  APPLICANT:  Acton, Susan L.
;  TITLE OF INVENTION: 59079 and 12599, Protein Kinase Family
;  TITLE OF INVENTION:  Members and Uses Therefor
;  FILE REFERENCE: MPI2001-047P1RCP1(M)
;  CURRENT APPLICATION NUMBER: US/11/186,731
;  CURRENT FILING DATE:  2005-07-21
;  PRIOR APPLICATION NUMBER: US/10/077,130
;  PRIOR FILING DATE: 2002-02-15
;  PRIOR APPLICATION NUMBER: 60/269201
;  PRIOR FILING DATE: 2001-02-15
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 7968
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-11-186-731-5

  Query Match             9.3%;  Score 149.5;  DB 7;  Length 7968;
  Best Local Similarity   26.1%;  Pred. No. 0.00031;
  Matches   54;  Conservative   24;  Mismatches   64;  Indels   65;  Gaps    9;

Qy         33 KDQQVVTAVEYQ---EAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQTLQGDFKNRAEM 89
              |:| |    |: :    |:|:|:  :    : : | | |: :|
Db       1076 KEQSVHNEVQAEAGASAMLSCEVAQ--AQTEVTWYKDGKKLS---------------SS 1117

Qy         90 IDFNIRIKNVTR---------SDAGKYRCEVSA---------PSEQGQNLEEDTVTLEVL 131
                 : :|  ||          :|||:| ||               :|   :| :|  ||
Db       1118 SKVGMEVKGCTRRLVLPQAGKADAGEYSCEAGGQRVSFHLHITEPKGVFAKEQSVHNEV- 1176

Qy        132 VAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSQSTNSSYT 191
                          | :||   | |:     |  | ||:||| :|         |::|
Db       1177 -----------QAEAGTTAMLSCE--VAQPQTEVTWYKDGKKL---------SSSSKVR 1213

Qy        192 MNTK--TGTLQFNTVSKLDTGEYSCEA 216
                |  |  | |    | | | |||||||
Db       1214 MEVKGCTRRLVVQQVGKADAGEYSCEA 1240


RESULT 13
US-10-131-826A-348
; Sequence 348, Application US/10131826A
; Publication No. US20050245730A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C128
;  CURRENT APPLICATION NUMBER: US/10/131,826A
;  CURRENT FILING DATE:  2002-04-24
;  PRIOR APPLICATION NUMBER: 60/049911
;  PRIOR FILING DATE: 1997-06-18
;  PRIOR APPLICATION NUMBER: 60/056974
;  PRIOR FILING DATE: 1997-08-26
;  PRIOR APPLICATION NUMBER: 60/059113
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059115
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059117
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059122
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059184
;  PRIOR FILING DATE: 1997-09-17
;  PRIOR APPLICATION NUMBER: 60/059263
;  PRIOR FILING DATE: 1997-09-18
;  PRIOR APPLICATION NUMBER: 60/059352
;  PRIOR FILING DATE: 1997-09-19
;  PRIOR APPLICATION NUMBER: 60/059588
;  PRIOR FILING DATE: 1997-09-19
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 348
;   LENGTH: 398
;   TYPE: PRT
;   ORGANISM: Homo Sapien
```

US-10-131-826A-348

Query Match 8.9%; Score 143.5; DB 6; Length 398;
Best Local Similarity 24.9%; Pred. No. 2.4e-05;
Matches 71; Conservative 46; Mismatches 117; Indels 51; Gaps 14;

```
Qy         42 EYQEAILACKTPKKTVSSRLEWKKLGRSVSFVYYQQT-LQGDFKNRAEMIDFNIRIKNVT 100
              |  | | |::     ::|| |:|  :    :: : | :| |   :   :  ::  : ||
Db        144 EKDTATLNCQSSGSKPAARLTWRKGDQE---LHGEPTRIQEDPNGKTFTVSSSVTFQ-VT 199

Qy        101 RSDAG-KYRCEVSAPSEQGQNLEEDTVTLEVLVAPAVPSCEVPSSALSGTVVELRCQDKE 159
              | | |    | |:  | :| :    :  :|||  |       |     | : | |: :
Db        200 REDDGASIVCSVNHESLKGAD-RSTSQRIEVLYTPTAMIRPDPPHPREGQKLLLHCEGR- 257

Qy        160 GNPAP-EYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARN 218
              ||| | :| | |:|      | |            |:   | |  ::| |:| | | | :
Db        258 GNPVPQQYLWEKEG----SVPPL----------KMTQESALIFPFLNKSDSGTYGCTATS 303

Qy        219 SVGYRRCPGKRMQVDDLN----------ISGIIAAVVVVALVISVCGLGVCYAQRKG-Y 266
              ::|  :    : |:| :          | | | | :|  |:| :  ||    : || |
Db        304 NMGSYKA-YYTLNVNDPSPVPSSSSTYHAIIGGIVAFIVFLLLIMLIFLGHYLIRHKGTY 362

Qy        267 FSKETSFQKSNSSSKATTMSENVQWLTPVIPALWKAAAGGSRGQE 311
               : |   : |: :  | |             |:  |  | | | :
Db        363 LTHEA--KGSDDAPDADT------------AIINAEGGQSGGDD 392
```

RESULT 14
US-11-135-855-36
; Sequence 36, Application US/11135855
; Publication No. US20050255557A1
; GENERAL INFORMATION:
; APPLICANT: SMITHKLINE BEECHAM CORPORATION
; APPLICANT: SMITHKLINE BEECHAM p.l.c.
; TITLE OF INVENTION: NOVEL COMPOUNDS
; FILE REFERENCE: GP50013
; CURRENT APPLICATION NUMBER: US/11/135,855
; CURRENT FILING DATE: 2005-05-24
; PRIOR APPLICATION NUMBER: US/10/203,708
; PRIOR FILING DATE: 2002-08-13
; PRIOR APPLICATION NUMBER: PCT/US01/04703
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: 60/182,172
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: 60/186,084
; PRIOR FILING DATE: 2000-02-29
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
; LENGTH: 1694
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-135-855-36

Query Match 8.9%; Score 143.5; DB 7; Length 1694;
Best Local Similarity 27.2%; Pred. No. 0.00014;
Matches 52; Conservative 24; Mismatches 82; Indels 33; Gaps 8;

```
Qy         38 VTAVEYQEAILACKTPKKTVSS--RLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIR 95
              |  :|  |    | ||   :    ||:|:    : |  :  |  :       | :
Db        148 VELLEGTEVDFNCSTPYVCLQEQVRLQWQGQDPARSVTFNSQKFEPTGVGHLETLHM--- 204

Qy         96 IKNVTRSDAGK-YRCEVSAPSEQGQNLEEDTVTLEVLVAP-AVPSCEVPS--SALSGTVV 151
                 ::  | |:  ||::|  : : |:     : |:|  ||  |     ||  : | | :|
Db        205 --AMSWQDHGRILRCQLSVANHRAQS----EIHLQVKYAPKGVKILLSPSGRNILPGELV 258

Qy        152 ELRCQDKEGNPA-PEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTG 210
              | ||     ||     | |||:||                |||| |     :  | |
Db        259 TLTCQVNSSYPAVSSIKWLKDGVRL----------------QTKTGVLHLPQAAWSDAG 301

Qy        211 EYSCEARNSVG 221
              |:|:| | ||
Db        302 VYTCQAENGVG 312
```

RESULT 15
US-11-135-855-35
; Sequence 35, Application US/11135855
; Publication No. US20050255557A1
; GENERAL INFORMATION:
; APPLICANT: SMITHKLINE BEECHAM CORPORATION
; APPLICANT: SMITHKLINE BEECHAM p.l.c.
; TITLE OF INVENTION: NOVEL COMPOUNDS
; FILE REFERENCE: GP50013
; CURRENT APPLICATION NUMBER: US/11/135,855
; CURRENT FILING DATE: 2005-05-24
; PRIOR APPLICATION NUMBER: US/10/203,708
; PRIOR FILING DATE: 2002-08-13
; PRIOR APPLICATION NUMBER: PCT/US01/04703
; PRIOR FILING DATE: 2001-02-14
; PRIOR APPLICATION NUMBER: 60/182,172
; PRIOR FILING DATE: 2000-02-14
; PRIOR APPLICATION NUMBER: 60/186,084
; PRIOR FILING DATE: 2000-02-29
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
; LENGTH: 1709
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-135-855-35

Query Match 8.9%; Score 143.5; DB 7; Length 1709;
Best Local Similarity 27.2%; Pred. No. 0.00015;
Matches 52; Conservative 24; Mismatches 82; Indels 33; Gaps 8;

```
Qy         38 VTAVEYQEAILACKTPKKTVSS--RLEWKKLGRSVSFVYYQQTLQGDFKNRAEMIDFNIR 95
              |  :|  |    | ||   :    ||:|:    : |  :  |  :       | :
Db        148 VELLEGTEVDFNCSTPYVCLQEQVRLQWQGQDPARSVTFNSQKFEPTGVGHLETLHM--- 204

Qy         96 IKNVTRSDAGK-YRCEVSAPSEQGQNLEEDTVTLEVLVAP-AVPSCEVPS--SALSGTVV 151
                 ::  | |:  ||::|  : : |:     : |:|  ||  |     ||  : | | :|
Db        205 --AMSWQDHGRILRCQLSVANHRAQS----EIHLQVKYAPKGVKILLSPSGRNILPGELV 258

Qy        152 ELRCQDKEGNPA-PEYTWFKDGIRLLENPRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTG 210
              | ||     ||     | |||:||                |||| |     :  | |
Db        259 TLTCQVNSSYPAVSSIKWLKDGVRL----------------QTKTGVLHLPQAAWSDAG 301

Qy        211 EYSCEARNSVG 221
              |:|:| | ||
Db        302 VYTCQAENGVG 312
```

Search completed: December 6, 2005, 13:45:52
Job time : 13 secs